JVC

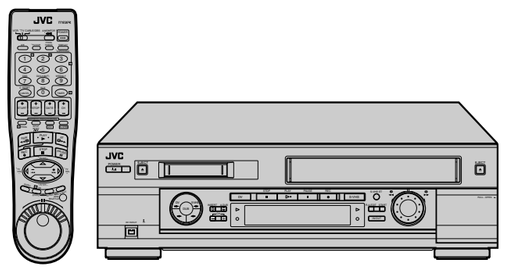
SR-VS20U

# JVC

# SERVICE MANUAL

## Mini DV/S-VHS VIDEO CASSETTE RECORDER

# SR-VS20U



S-VHS
Mini DV NTSC
Hi-Fi
VCR Plus+ G3 CABLE BOX CONTROL
Super VHS ET

## SPECIFICATIONS

### GENERAL

| | |
|---|---|
| Power requirement | : AC 120 V∿, 60 Hz |
| Power consumption | |
| Power on | : 35 W |
| Power off | : 5.5 W |
| Temperature | |
| Operating | : 5°C to 40°C (41°F to 104°F) |
| Storage | : –20°C to 60°C (–4°F to 140°F) |
| Operating position | : Horizontal only |
| Dimensions (WxHxD) | : 435 mm x 127 mm x 390 mm |
| Weight | : 6.9 kg |
| Input/Output | : RCA connectors: (IN x 2, OUT x 2) S-Video connectors: (IN x 2, OUT x 2) DV connectors: (IN/OUT x 1) (4-pin, IEEE1394 conformity, digital input/output) |

### VHS DECK VIDEO/AUDIO

| | |
|---|---|
| Signal system | : NTSC-type colour signal and EIA monochrome signal, 525 lines/60 fields |
| Recording system | : DA4 (Double Azimuth) head helical scan system |
| Format | : S-VHS/VHS NTSC standard |
| Signal-to-noise ratio | : 45 dB |
| Horizontal resolution | : 240 lines (VHS) 400 lines (S-VHS) |
| Frequency range | : 70 Hz to 10,000 Hz (Normal audio) 20 Hz to 20,000 Hz (Hi-Fi audio) |
| Maximum recording time | |
| (SP) | : 210 min. with ST-210 video cassette |
| (EP) | : 630 min. with ST-210 video cassette |

### DV DECK VIDEO/AUDIO

| | |
|---|---|
| Signal system | : NTSC-type colour signal, 525 lines/60 fields |
| Recording system | : Digital Component Recording |
| Format | : DV format (SD mode) |
| Cassette | : Mini DV Cassette |
| Maximum recording time | |
| (SP) | : 60 min. with M-DV60ME cassette |
| (LP) | : 90 min. with M-DV60ME cassette |
| Audio recording system | : PCM 48 kHz, 16 bit (2 ch)/ 32 kHz, 12 bit (4 ch) |

### TUNER

| | |
|---|---|
| Tuning system | : Frequency-synthesized tuner |
| Channel coverage | |
| VHF | : Channels 2–13 |
| UHF | : Channels 14–69 |
| CATV | : 113 Channels |

### TIMER

| | |
|---|---|
| Clock reference | : Quartz |
| Program capacity | : 1-year programmable timer/ 6 programs each on the VHS and DV deck |
| Memory backup time | : Approx. 60 min. |

### ACCESSORIES

| | |
|---|---|
| Provided accessories | : RF cable (F-type), BNC/RCA adapter x 2, Infrared remote control unit, “AA” battery x 2, Audio/Video Cable, S-Video cable (4-pin), Controller |

*Specifications shown are for SP mode unless otherwise specified.*
*E. & O.E. Design and specifications subject to change without notice.*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# Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

## ● Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the ⚠ symbol and shaded ( ) parts are critical for safety.
   Replace only with specified part numbers.
   **Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.**

3. Fuse replacement caution notice.
   Caution for continued protection against fire hazard.
   Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape 3) Spacers 5) Barrier
   2) PVC tubing 4) Insulation sheets for transistors

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

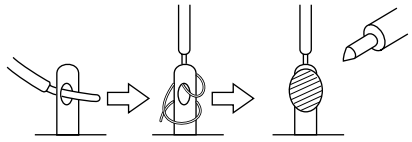


**Fig.1**

7. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

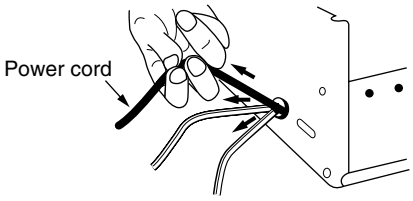



**Fig.2**

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)
    In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission.
    Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits.
    Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector
    In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

    **1) Connector part number :** E03830-001
    **2) Required tool :** Connector crimping tool of the proper type which will not damage insulated parts.
    **3) Replacement procedure**
    (1) Remove the old connector by cutting the wires at a point close to the connector.
    Important : Do not reuse a connector (discard it).

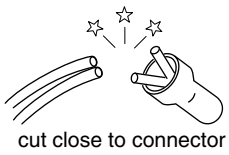



**Fig.3**

(2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

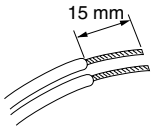



**Fig.4**

(3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

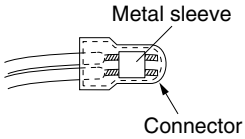



**Fig.5**

(4) As shown in Fig.6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

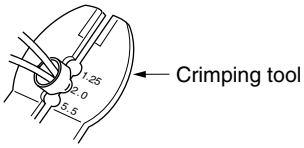



**Fig.6**

(5) Check the four points noted in Fig.7.

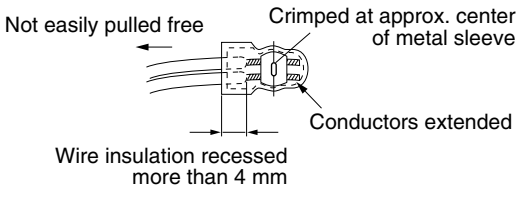

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

**Fig.7**

# ● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

**1. Insulation resistance test**

Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

**2. Dielectric strength test**

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

**3. Clearance distance**

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

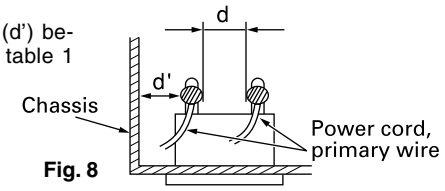



**Fig. 8**

**4. Leakage current test**

Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

**Measuring Method :** (Power ON)

Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

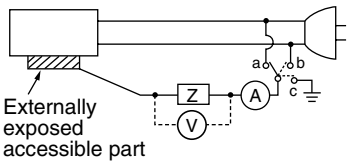



**Fig. 9**

**5. Grounding (Class 1 model only)**

Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).

**Measuring Method:**

Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.

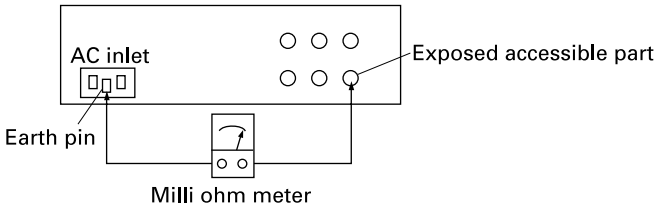



**Fig. 10**

**Grounding Specifications**

| Region | Grounding Impedance (Z) |
|---|---|
| USA & Canada | Z ≦ 0.1 ohm |
| Europe & Australia | Z ≦ 0.5 ohm |

| AC Line Voltage | Region | Insulation Resistance (R) | Dielectric Strength | Clearance Distance (d), (d') |
|---|---|---|---|---|
| 100 V | Japan | R ≧ 1 MΩ/500 V DC | AC 1 kV 1 minute | d, d' ≧ 3 mm |
| 100 to 240 V | | | AC 1.5 kV 1 miute | d, d' ≧ 4 mm |
| 110 to 130 V | USA & Canada | 1 MΩ ≦ R ≦ 12 MΩ/500 V DC | AC 1 kV 1 minute | d, d' ≧ 3.2 mm |
| 110 to 130 V<br>200 to 240 V | Europe & Australia | R ≧ 10 MΩ/500 V DC | AC 3 kV 1 minute (Class Ⅱ)<br>AC 1.5 kV 1 minute (Class Ⅰ) | d ≧ 4 mm<br>d' ≧ 8 mm (Power cord)<br>d' ≧ 6 mm (Primary wire) |

**Table 1** Specifications for each region

| AC Line Voltage | Region | Load Z | Leakage Current (i) | a, b, c |
|---|---|---|---|---|
| 100 V | Japan | 1 kΩ | i ≦ 1 mA rms | Exposed accessible parts |
| 110 to 130 V | USA & Canada | 0.15 μF, 1.5 kΩ | i ≦ 0.5 mA rms | Exposed accessible parts |
| 110 to 130 V<br>220 to 240 V | Europe & Australia | 2 kΩ | i ≦ 0.7 mA peak<br>i ≦ 2 mA dc | Antenna earth terminals |
| | | 50 kΩ | i ≦ 0.7 mA peak<br>i ≦ 2 mA dc | Other terminals |

**Table 2** Leakage current specifications for each region

**Note:** These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

# SECTION 1
# DISASSEMBLY

## 1.1 HOW TO REMOVE THE MAJOR PARTS

### 1.1.1 Introduction

This set is a double-deck video recorder integrating a Mini DV deck and a VHS deck. Its internal structure is divided into three sections that include the power supply, VHS and DV sections. Therefore, the removal of major parts will also be described under three separate sections as listed below.

1. COMMON section
2. VHS section
3. DV section

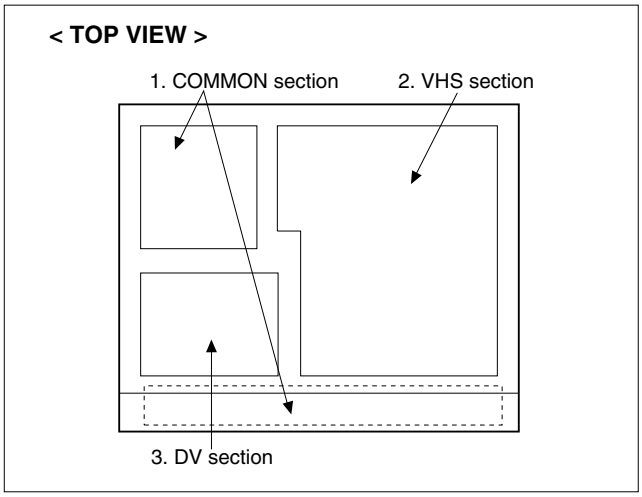



Fig. 1-1-1

## 1.2 HOW TO READ THE DISASSEMBLY AND ASSEMBLY

| Step/ Loc No. | Part name | Fig. No. | Point | Note |
|---|---|---|---|---|
| ① | Top cover, Bracket | COM1 | 4(S1), 3(S2), 2(L1), (L2) 2(S3) | — |
| ② | Front panel assembly | COM2 | 8(L3), CN7507(WR1), CN3011(WR2) | <Note 1,2,3,4> |
| ↑ (1) | ↑ (2) | ↑ (3) | ↑ (4) | ↑ (5) |

(1) Order of steps in Procedure
When reassembling, perform the step(s) in the reverse order. These numbers are also used as the identification (location) No. of parts Figures.
(2) Part name to be removed or installed.
(3) Fig. No. showing procedure or part location.
(4) Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.
P= Spring, W= Washer, S= Screw, L= Locking tab, SD= Solder, CN**(WR**)= Remove the wire (WR**) from the connector (CN**).

**Note:**

- ***The bracketed ( ) WR of the connector symbol are assigned nos. in priority order and do not correspond to those on the spare parts list.***

(5) Adjustment information for installation

## 1.3 DISCONNECTION OF CONNECTORS (WIRES)

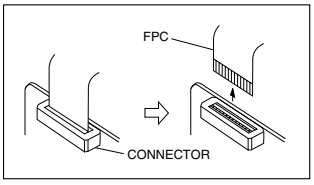



Fig. 1-3-1

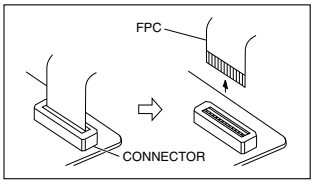



Fig. 1-3-2

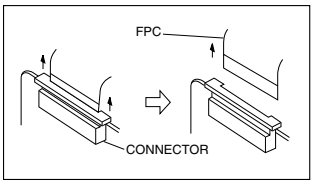



Fig. 1-3-3

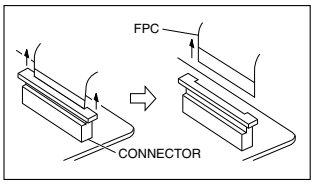



Fig. 1-3-4

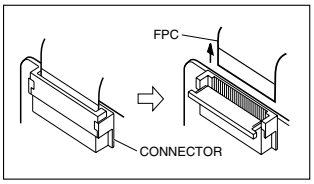



Fig. 1-3-5

## 1.4 SCREWS USED CABINET COMPONENTS AND BOARD ASSEMBLIES

Table 1-4-1 below shows the symbols, shapes, colors and part numbers of screw that are used in the cabinet components and board assemblies and are appearing in the disassembling/reassembling diagrams in this manual.
When screwing them again in reassembling, be sure to use them correctly referring to the following table.

**Notes:**

- Screw that are asterisked (marked with*) in the shape column are fixed with screw lock agent. If such the screw is once removed, never use it again.
- The Screw symbols are assigned nos. in priority order and do not correspond to those on the spare parts list.

| SYMBOL | PARTS NO. | COLOR |
|---|---|---|
| S1 | QYTDST3006R | SILVER BLACK |
| S2 | QYTDST3006M | BLACK |
| S3 | QYTDSF3010Z | GOLD |
| S4 | QYTDSF2606Z | GOLD |
| S5 | QYTDST3006Z | GOLD |
| S6 | QYTDSF3008M | BLACK |
| S7 | QYTDST2610Z | GOLD |
| S8 | PQ21623-2-5 | GOLD |
| S9 | PQ40413 | BLACK |
| S10 | LP40700-001A | BLACK |
| S11 | QYTDSP2004Z | GOLD |
| S12 | QYTDST2004Z | GOLD |
| S13 | YQ43893 | SILVER |

Table 1-4-1

### 1.5 HOW TO REMOVE THE MAJOR PARTS <COM section>

#### 1.5.1 Disassembly flow chart

This flowchart shows the disassembly procedure for the exterior parts and electrical parts.
Basically, reverse this procedure when assembling them.

① Top cover, Bracket
↓
② Front panel assembly
↓
③ Display board assembly, Display/SW board assembly, SW board assembly, LED1, 2 board assembly
↓
④ SW REG board assembly
↓
⑤ Regulator board assembly
↓
⑥ Rear cover

#### 1.5.2 Disassembly/assembly method <COM section>

| Step/ Loc No. | Part name | Fig. No. | Point | Note |
|---|---|---|---|---|
| ① | Top cover, Bracket | COM1 | 4(S1), 3(S2), 2(L1), (L2)<br>2(S3) | — |
| ② | Front panel assembly | COM2 | 8(L3), CN7507(WR1), CN3011(WR2) | <Note 1,2,3,4> |
| ③ | Display board assembly, LED/SW board assembly, Eject SW board assembly, Jack board assembly, Jog board assembly | COM3 | 10(S4)<br>6(S4), Knob(Jog), Knob(Shuttle), | — |
| ④ | SW REG board assembly | COM4 | 2(S5), 2(L4), (L5) CN5301(WR3), | <Note 1, 5> |
| ⑤ | Regulator board assembly | COM5 | 3(L6), CN5322(WR4), CN5321(WR5), CN5325(WR6), CN5324(WR7), CN5323(WR8) | <Note 1, 5> |
| ⑥ | Rear cover | COM6 | 4(S2), 3(S6), Fan motor | <NOTE 6> |

<Note 1>
When attaching the FPC, be sure to connect it in the correct orientation.

<Note 2>
When attaching the front panel assy, make sure that the door openers of both decks (DV, VHS) are in the down position.

<Note 3>
When attaching the front panel assy, be careful not to damage the DV terminals.

<Note 4>
When attaching the FPC take care that it is not caught.
Pass the DV-side FPC between the base (2) and DV Main board assy.
Pass the two VHS-side FPCs below the base (1).

<Note 5>
When removing the SW REG board assembly or Regulator board assembly, unhook the several spacers connecting it with pliers from the top side.

<Note 6>
Perform the work by leaving fan motor attached to the rear cover except when replacing the fan motor.
When attaching the rear cover, please be careful with the wiring.

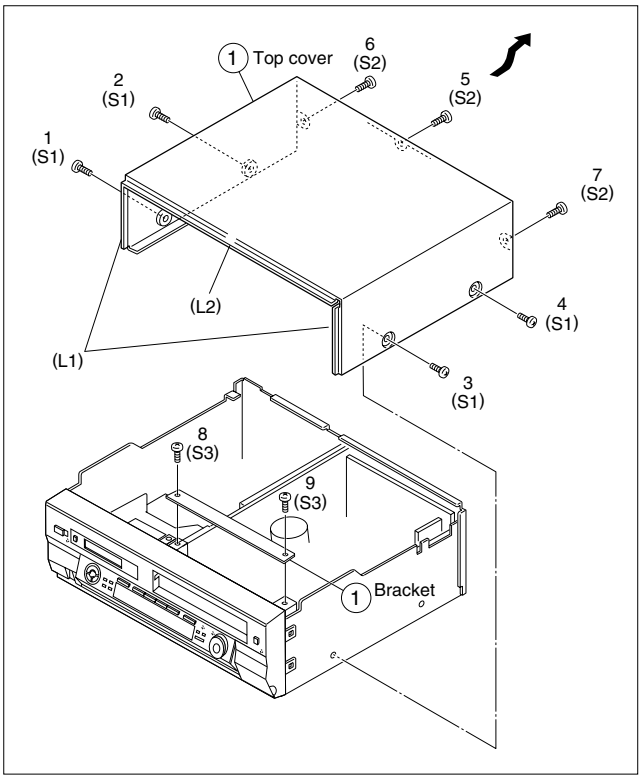



Fig. COM1

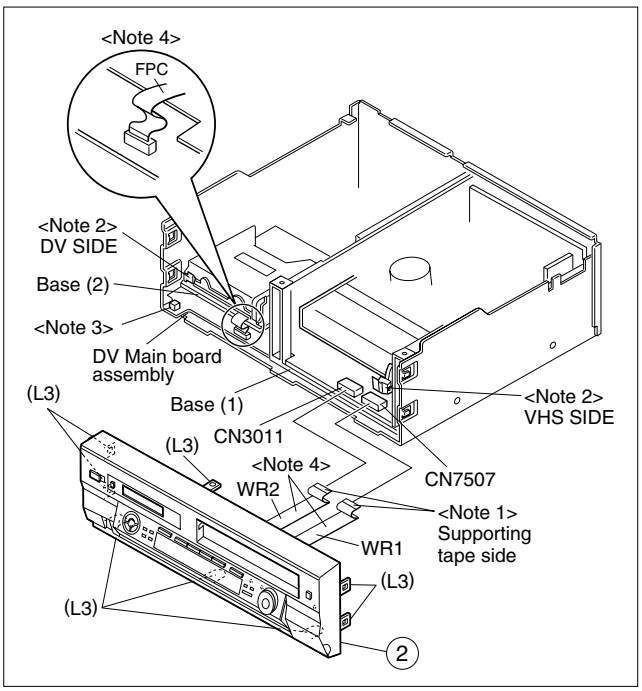



Fig. COM2

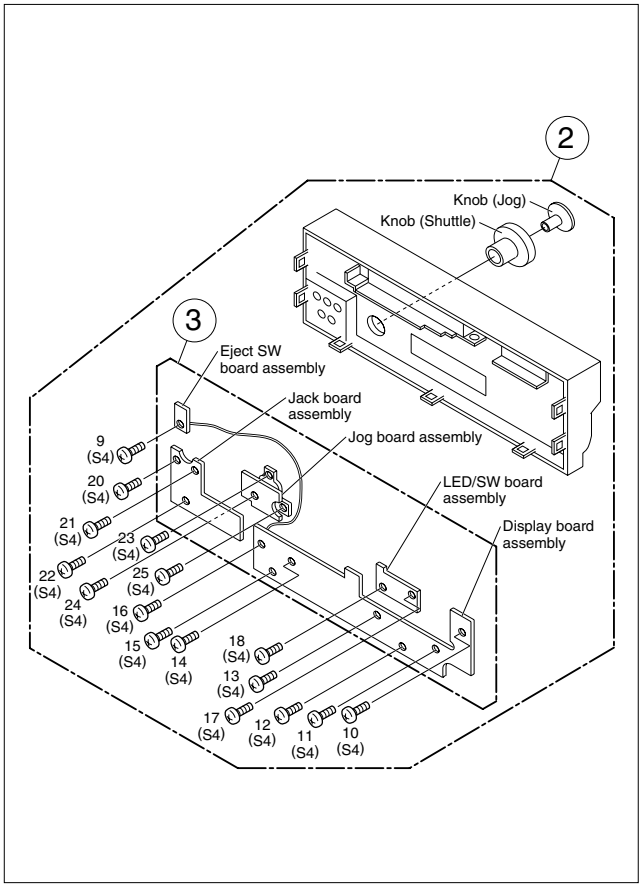



Fig. COM3

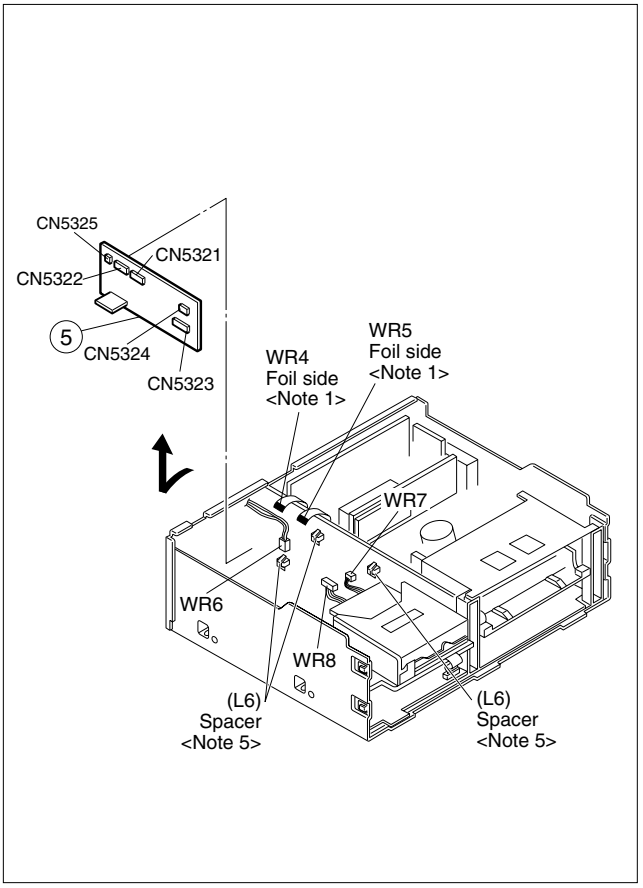



Fig. COM5

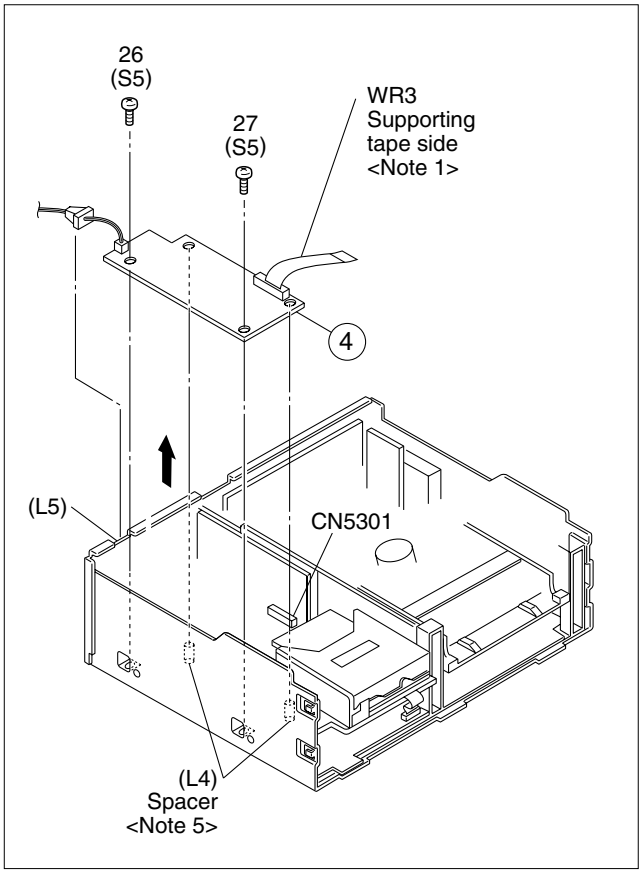



Fig. COM4

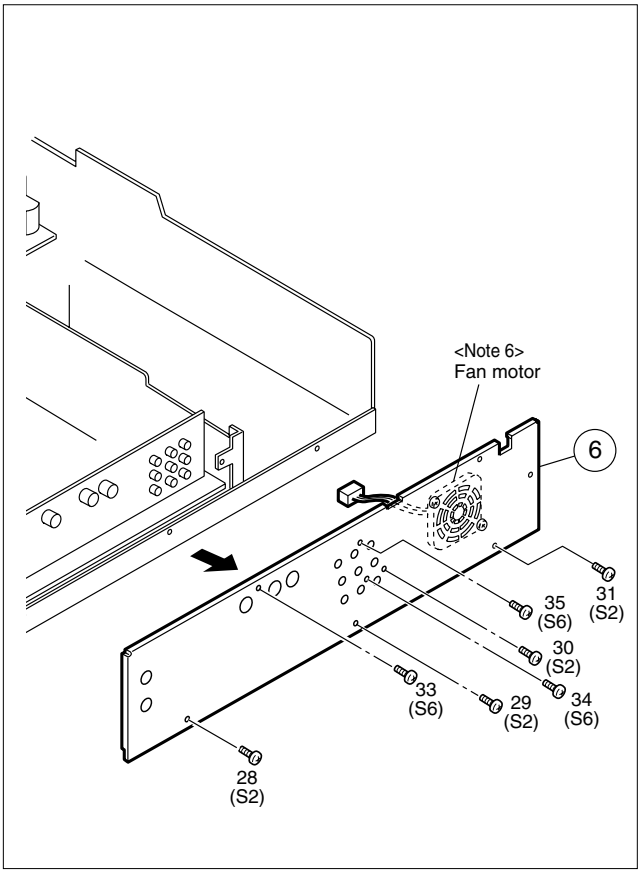



Fig. COM6

### 1.6 HOW TO REMOVE THE MAJOR PARTS <VHS section>

#### 1.6.1 Disassembly flow chart

This flowchart shows the disassembly procedure for the exterior parts and electrical parts.
Basically, reverse this procedure when assembling them.
However, it is required to remove the common section parts as far as①"Top cover Bracket" and②"Front panel assembly" in advance. (See section 1.5.)

① Drum assembly
↓
② Mechanism assembly
↓
③ Main board assembly
↓
④ Base (1)

#### 1.6.2 DIsassembly/assembly method <VHS section>

| Step/ Loc No. | Part name | Fig. No. | Point | Note |
|---|---|---|---|---|
| ① | Drum assembly | V1 | 3(S7), CON1(WR9), CN1(WR10) | <Note 1,2> |
| | (Inertia plate) | | 4(L1) | |
| | (Roller arm assy) | | (P1), (L2) | |
| ② | Mechanism assembly | V2 | 2(S8), (S9), (S10), (L3), (L4), CN1(WR11), | <Note 2,4> |
| ③ | Main board assembly | V3 | 2(S3), (S5), CN5321(WR5), CN5322(WR4), CN3014(WR14), CN703(WR15), CN2601(WR16) | <Note 2> |
| ④ | Base (1) | V4 | (S3), 3(S5) | — |

<Note 1>
When attaching or removing the FPC, take care not to disconnect any of the wires.

<Note 2>
When attaching the FPC, be sure to connect it in the correct orientation.

<Note 3>
When attaching wires, connect them in the correct orientation.

<Note 4>
- When it is required to remove the screws (S8) retaining the Mechanism assembly, please refer to the "Procedures for Lowering the Cassette holder assembly"(See on page 1-5).
- When removing the Mechanism assembly only, unhook the two spacers connecting it with the Main board assembly with pliers from the back side of the Main board assembly first, and then remove the Mechanism assembly.
- When reattaching the Mechanism assembly to the Main board assembly, take care not to damage the sensors on the Main board assembly (D3001: LED, Q3002: Start sensor, Q3003: End sensor, S3002: S cassette switch).

**Procedures for Lowering the Cassette holder assembly**

As the mechanism of this unit is integrated with the Housing assembly, the holder must be lowered and the two screws unscrewed when removing the Mechanism assembly.

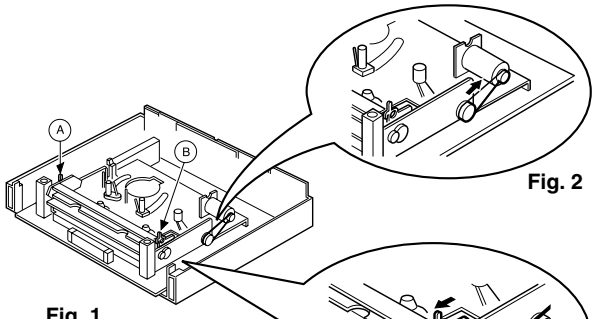



Fig. 1



Fig. 2

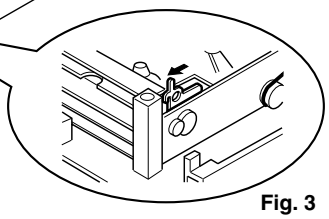


Fig. 3

Turn the loading motor pulley in the direction as indicated by Fig.2. As both Ⓐ and Ⓑ levers are lodged twice, push the levers in the direction as indicated by Fig.3 to release them. When pushing the levers, do it in the order of Ⓐ, Ⓑ, Ⓑ, Ⓐ. When the holder has been lowered, turn the pulley until the cassette holder is securely in place without allowing any up/down movement.

Procedures for Lowering the Cassette holder assembly

Note: When installing the Drum assembly, secure the screws (S7) in the order of ⓐ, ⓑ, ⓒ.

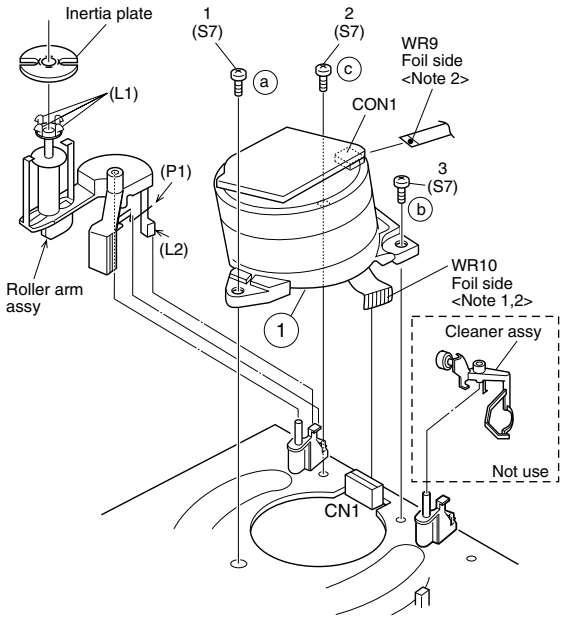



Fig. V1

Note: When installing the Mechanism assembly, secure the screws (S8) in the order of ⓐ,ⓑ.

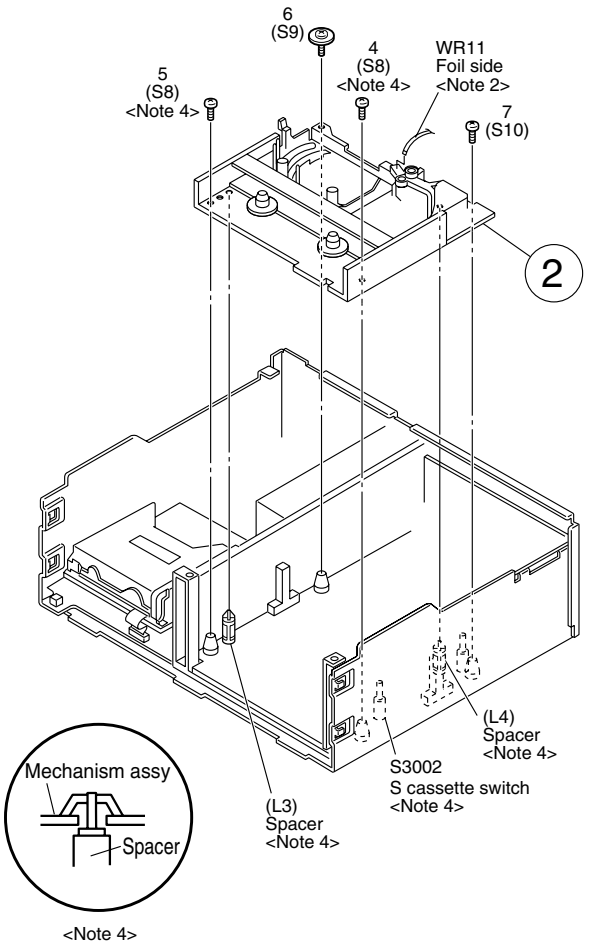



Fig. V2

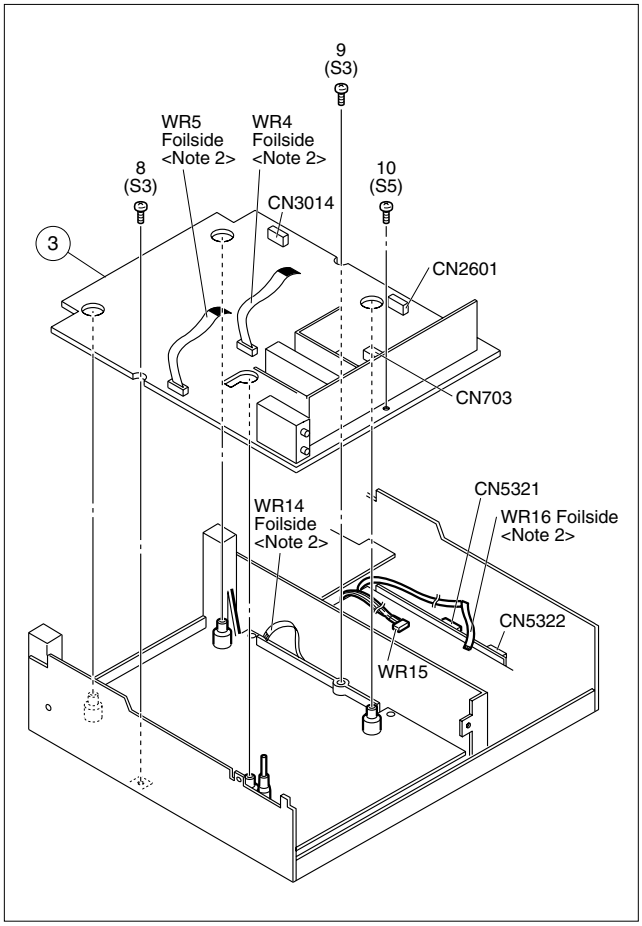



Fig. V3

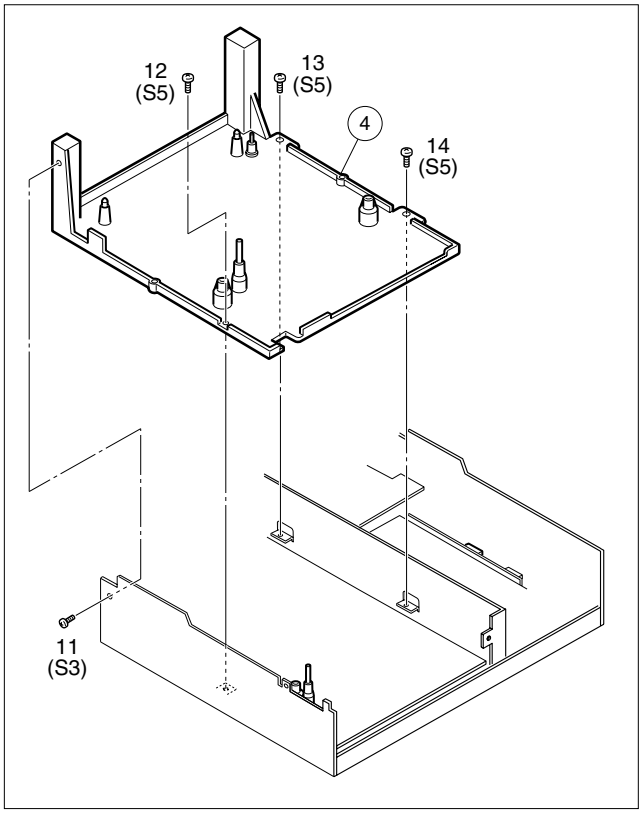



Fig. V4

## 1.7 HOW TO REMOVE THE MAJOR PARTS <DV section>

### 1.7.1 Disassembly flow chart

This flowchart shows the disassembly procedure for the exterior parts and electrical parts.
Basically, reverse this procedure when assembling them.
However, it is required to remove the common section parts as far as① "Top cover, Bracket" and② "Front panel assembly" in advance. (See section 1.5.)

① Mechanism assembly, P/R MDA board assembly
↓
② Cassette housing assembly
↓
③ P/R MDA board assembly
↓
④ Mechanism assembly
↓
⑤ Drum assembly
↓
⑥ DV Main board assembly

### 1.7.2 Disassembly/assembly method <DV section>

| Step/ Loc No. | Part name | Fig. No. | Point | Note |
|---|---|---|---|---|
| ① | Mechanism assembly, P/R MDA board assembly | D1 | 4(S5), CN1502(WR17), CN5002(WR18), CN5506(WR19), CN5501(WR7) | <Note 1> |
| ② | Cassette housing assembly | D2 | 2(S11),2(L1),2(L2), CN5507(WR20) | — |
| ③ | P/R MDA board assembly | D3 | (S12),(S11),2(S5), CN5502(WR21), CN5505(WR22), CN5503(WR23), CN5504(WR24), CN5001(WR25), Earth plate | — |
| ④ | Mechanism assembly | D4 | 3(S4), 2(L3) | — |
| ⑤ | Drum assembly | D5 | 3(S13) | <Note 2> |
| ⑥ | DV Main board assembly | D6 | 4(S5), CN1002(WR14), CN3701(WR16), CN1001(WR8), CN3501(WR15) | <Note 3,4> |

<Note 1>
With due regard to operational considerations, remove the parts located on the base (2) (i.e. Mechanism assembly, P/R MDA board assembly etc.) together before removing the major parts.

<Note 2>
Take care not to scratch or damage the drum assembly by the cleaner assembly when performing work.

<Note 3>
Take care not to damage the board assembly when detaching parts.

<Note 4>
When attaching the FPC, be sure to connect it in the correct orientation.

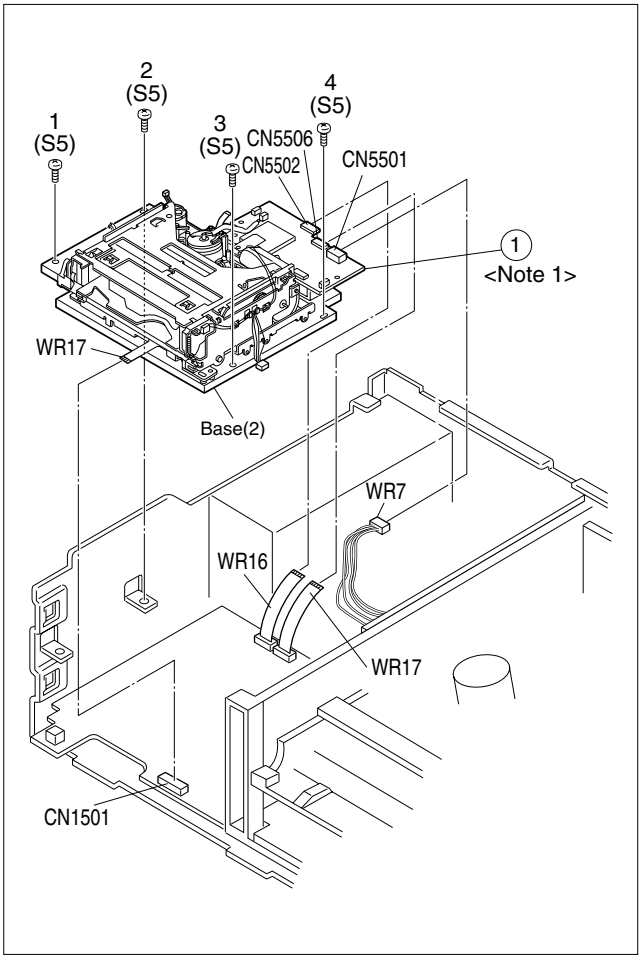



Fig. D1

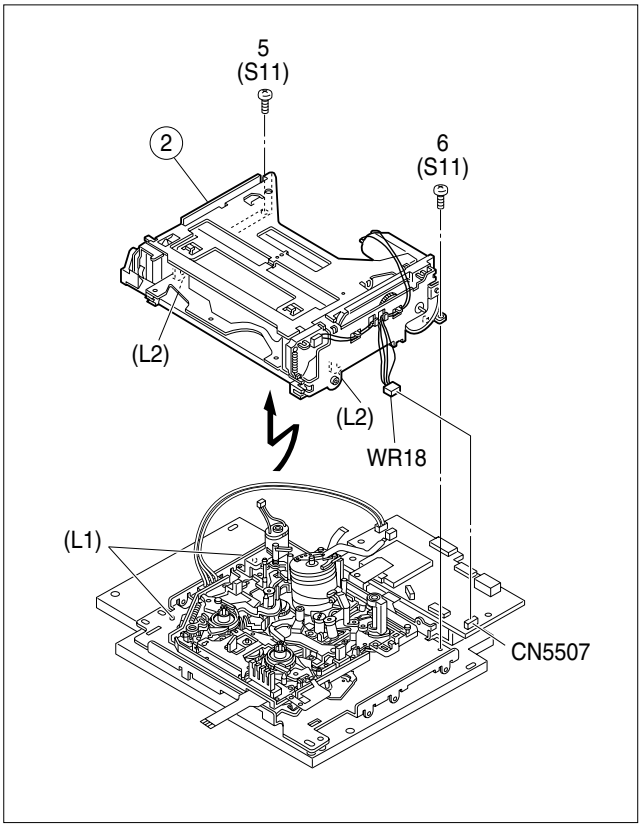



Fig. D2

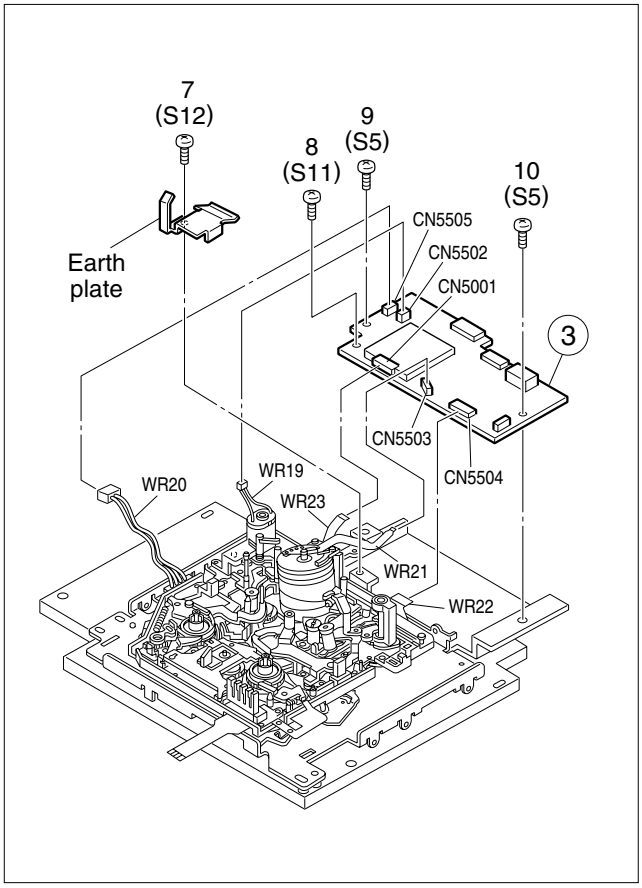



Fig. D3

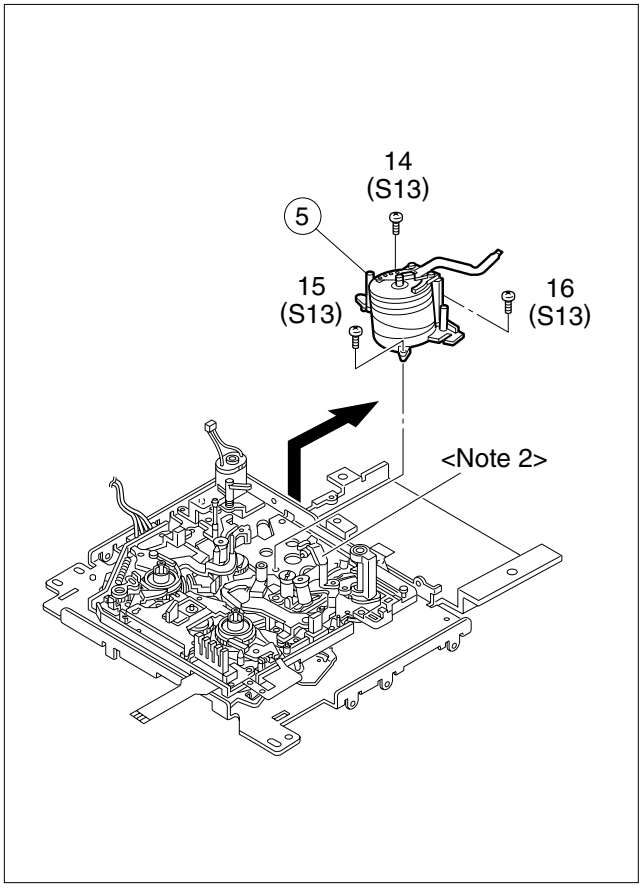



Fig. D5

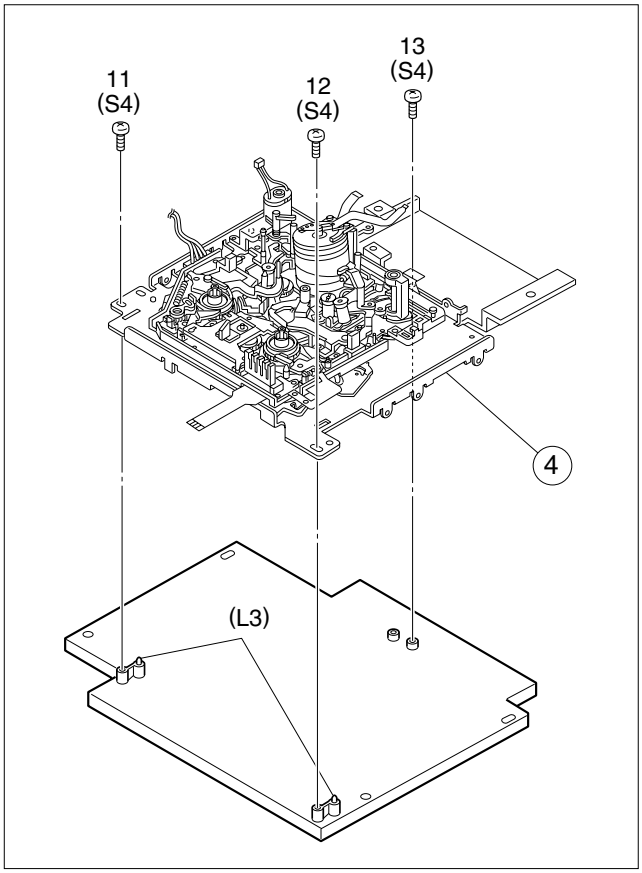



Fig. D4

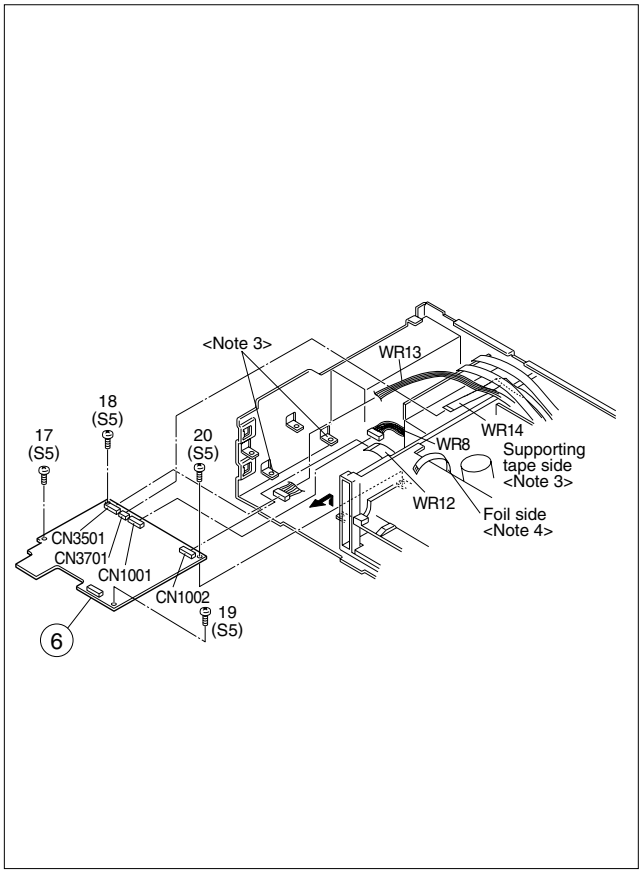



Fig. D6

## 1.8 SERVICE POSITIONS

The servicing locations for use in troubleshooting or servicing of the set are provided separately for the VHS and DV.

Ⅰ **SERVICE POSITIONS <VHS SIDE>**

Ⅱ **SERVICE POSITIONS <DV SIDE>**

### 1.8.1 Service position <VHS SIDE>

**<Removal>**

(1) Remove the top cover and bracket.
(2) Remove the front panel assembly.
(3) Remove the MAIN board assembly together with the mechanism assembly.

| | | Fig. No. (Page) | Screw | Hook, etc. | Connector | Note |
|---|---|---|---|---|---|---|
| (1) | Top cover, Bracket | COM1 (1-3) | 9 (No.1-9) | 2 + 1 (L1,2) | 0 | — |
| (2) | Front panel assembly | COM2 (1-3) | 0 | 8 (L3) | 2 (CN7507/ CN3011) | — |
| (3) | Rear cover | COM6 (1-3) | 7 (No.28-35) | 0 | 1 CN5325 | — |
| (4) | Main board assembly (etc.) | V2, V3 (1-6) | 13 (No.4-16) | 0 | 5 (CN5321/ CN5322/ CN3014/ CN703/ CN2601) | — |

Table 1-8-1

**< Installation >**

(1) Stand up the bottom chassis assembly so that the DV/ Regulator side is in the lower position.
(2) Connect the PATCH CORD to the three FPCs then connect CN3014, CN7508 and CN7509.
(3) By connecting a total of two FPCs and wires (CN703/ CN2601), carry out the installation so that the Main board assembly comes in the upper position.

**Point: • Take care that the FPCs and wires are not subjected to stress in this positioning.**

(4) Connect the PATCH CORDS to the two FPCs of the front panel assembly, then connect the CORDS to the CN7507/CN3011.

For the PATCH CORD is required, see Table 1-8-3.

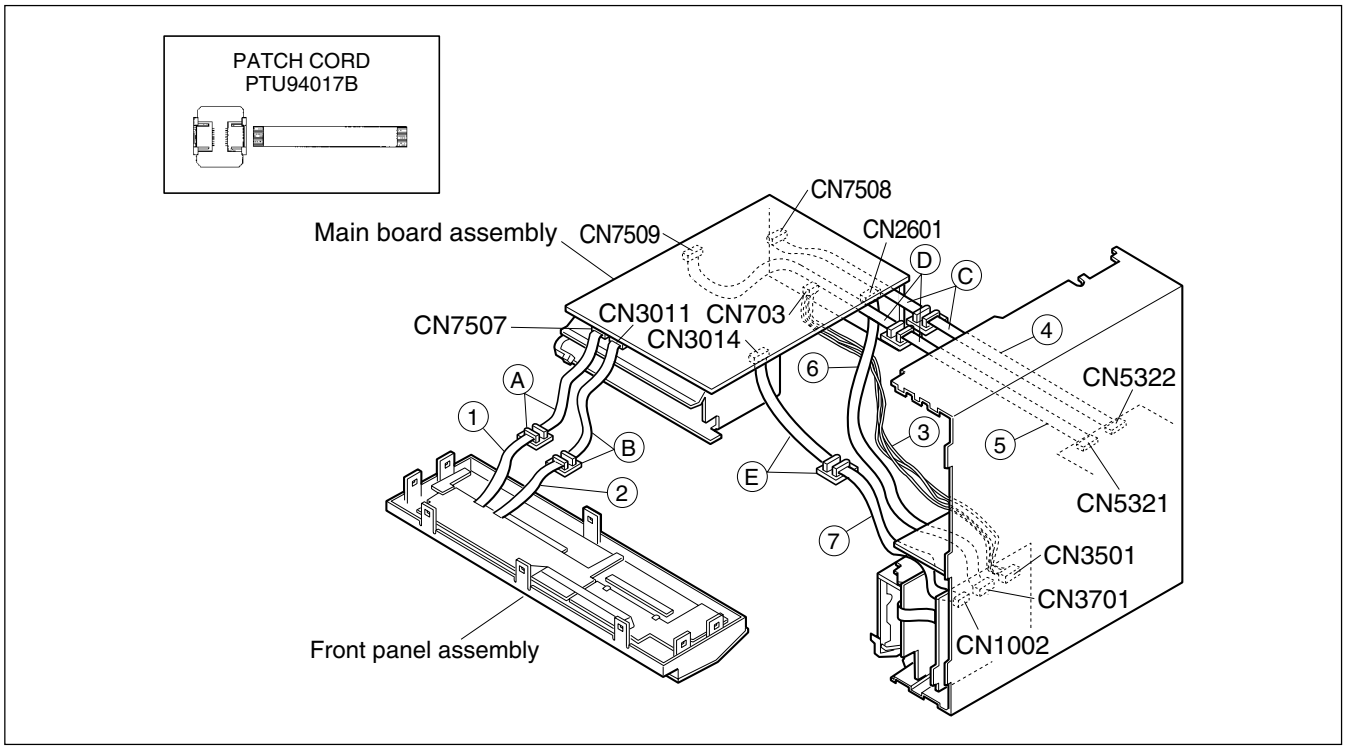



Fig. 1-8-1 Service position <VHS side>

### 1.8.2 Service position <DV SIDE>

**<Removal>**

(1) Remove the top cover and bracket.
(2) Remove the front panel assembly.
(3) Remove the mechanism assembly (DV side) together with the base (2).
(4) Remove the DV Main board assembly.

**Note:**

- ***Place an insulation sheet on the mechanism assembly (VHS side), then remove the DV Main board assembly and place it on the insulation sheet.***
  ***When removing the DV Main board assembly, only remove a connector CN1002 out of four.***
  ***Take care not to damage the parts during operating.***

| | | Fig. No. (Page) | Screw | Hook, etc. | Connector | Note |
|---|---|---|---|---|---|---|
| (1) | Top cover, Bracket | COM1 (1-3) | 9 (No.1-9) | 2 + 1 (L1,2) | 0 | — |
| (2) | Front panel assembly | COM2 (1-3) | 0 | 8 (L3) | 2 (CN7507/ CN3011) | — |
| (3) | Mechanism (DV SIDE)/ BASE (2) | D1 (1-7) | 4 (No.1-4) | 0 | 4 (CN1502/ CN5002/ CN5506/ CN5501) | — |
| (4) | DV Main board assembly | D6 (1-8) | 4 (No.17-20) | 0 | 1 (CN1002) | Note |

Table 1-8-2

**< Installation >**

For the PATCH CORDS, see Table 1-8-3.
The patch cords that are indicated in Table 1-8-3 are in one package.

(1) Connect a PATCH CORD to the FPC, and connect the end to the connector CN1002.
(2) Connect PATCH CORDS to the three connectors/FPCs (CN5506/CN5002/CN1502).
(3) Place the mechanism assembly (DV side) on the original position and connect the four wires/FPCs/connectors (CN5501/CN5506/CN5002/CN1502).
(4) Connect PATCH CORDS to the two FPCs of the FRONT PANEL ASSEMBLY, and connect the ends to the CN7507 and CN3011.

| | Board to Board | Wire |
|---|---|---|
| Ⓐ | PTU94022-16 | QUQ112-1840CG |
| Ⓑ | PTU94022-18 | QUQ112-1640CG |
| Ⓒ | PTU94022-11 | QUQ212-1140CG |
| Ⓓ | PTU94022-15 | QUQ212-1540CG |
| Ⓔ | YTU94072-06 | QUQ210-0640CG |
| Ⓕ | YTU94074-15 | QUQ105-1540AA |
| Ⓖ | YTU94074-26 | QUQ105-2640AA |
| Ⓗ | YTU94074-20 | QUQ105-2040AA |

Table 1-8-3

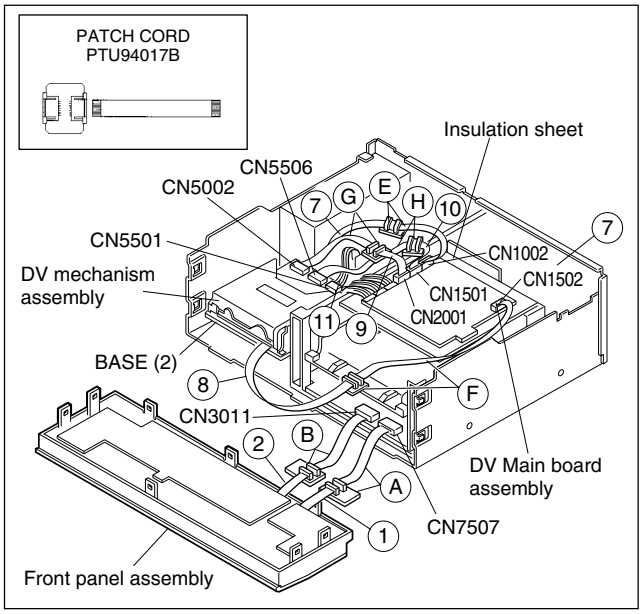



Fig. 1-8-2 Service position <DV side>

| | SYMBOL | CONNECTOR (WIRE) CONNECTIONS | | | PIN No | PATCH CORD |
|---|---|---|---|---|---|---|
| Ⅰ / Ⅱ | ① | MAIN CN7507 | — | JACK CN7002 | 16 | Ⓐ |
| Ⅰ / Ⅱ | ② | MAIN CN3011 | — | DISPLAY CN7001 | 18 | Ⓑ |
| Ⅰ | ③ | MAIN CN703 | — | DV MAIN CN3501 | 6 | — |
| Ⅰ | ④ | MAIN CN7508 | — | REGULATOR CN5322 | 13 | Ⓒ |
| Ⅰ | ⑤ | MAIN CN7509 | — | REGULATOR CN5321 | 15 | Ⓓ |
| Ⅰ | ⑥ | MAIN CN2601 | — | DV MAIN CN3701 | 8 | — |
| Ⅰ / Ⅱ | ⑦ | MAIN CN3014 | — | DV MAIN CN1002 | 6 | Ⓔ |
| Ⅱ | ⑧ | DV MAIN CN1502 | — | SENSOR | 15 | Ⓕ |
| Ⅱ | ⑨ | P/R MDA CN5002 | — | DV MAIN CN2001 | 26 | Ⓖ |
| Ⅱ | ⑩ | P/R MDA CN5506 | — | DV MAIN CN1501 | 20 | Ⓗ |
| Ⅱ | ⑪ | REGULATOR CN5324 | — | P/R MDA CN5501 | 5 | — |

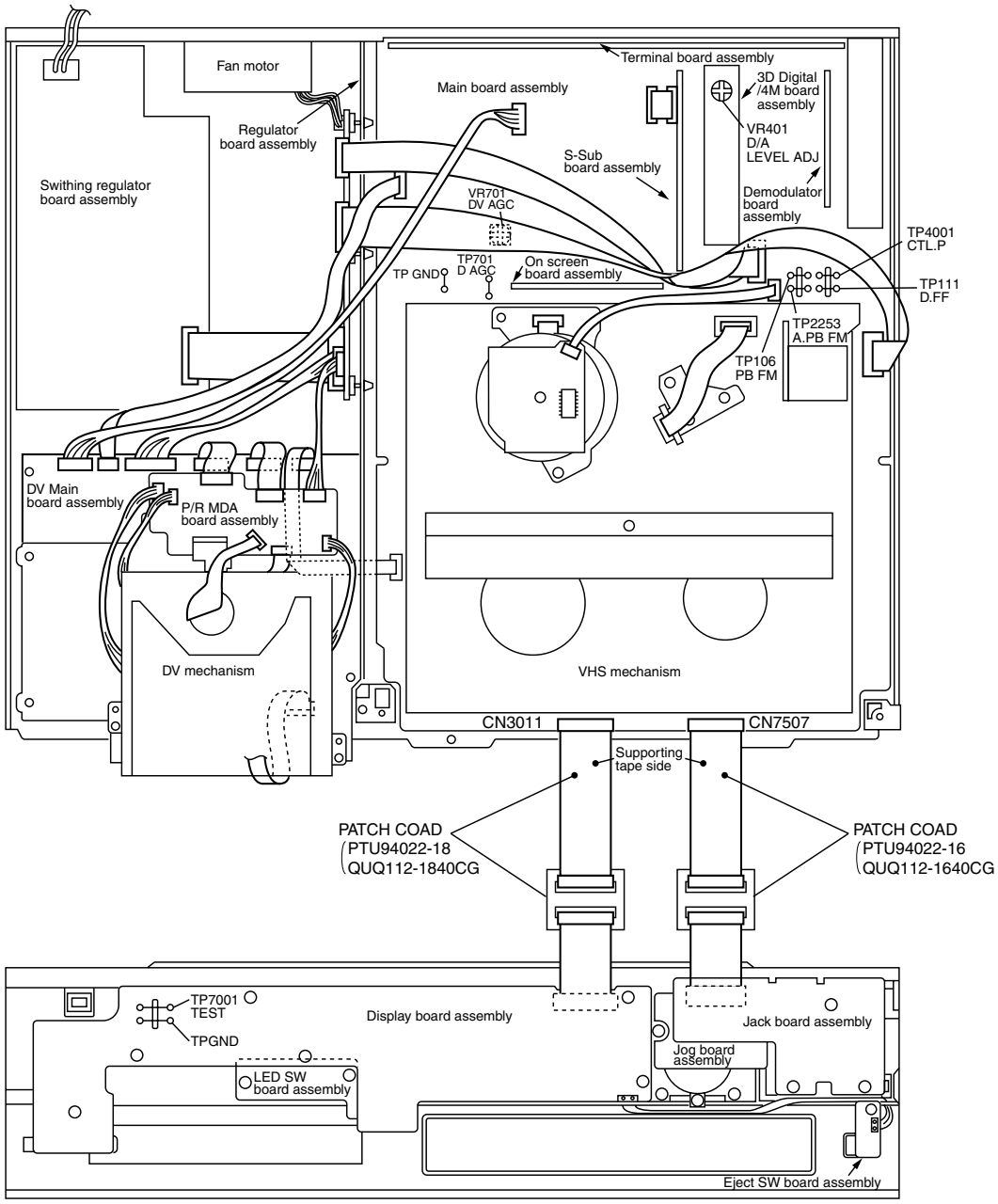
Table 1-8-4 Connection of Connectors

## 1.9 MECHANISM SERVICE MODE

This model has a unique function to enter the mechanism into every operation mode without loading of any cassette tape. This function is called the “MECHANISM SERVICE MODE”.

### 1.9.1 How to set the "MECHANISM SERVICE MODE"

(1) Disconnect VCR from AC.
(2) Connect TPGND and TP7001 (TEST) on the Display board assembly with a jump wire.
(3) Connect VCR to AC.
(4) Press the POWER button.
(5) With lock levers Ⓐ Ⓑ on the left and right of the Cassette holder assembly pulled toward the front, slide the holder in the same direction as the cassette insertion direction. (For the positions of lock levers Ⓐ Ⓑ, refer to the “Procedures for Lowering the Cassette holder assembly” on page 1-5 of 1.6 HOW TO REMOVE THE MAJOR PARTS <VHS section>
(6) The cassette holder lowers and, when the loading has completed, the mechanism enters the desired mode.

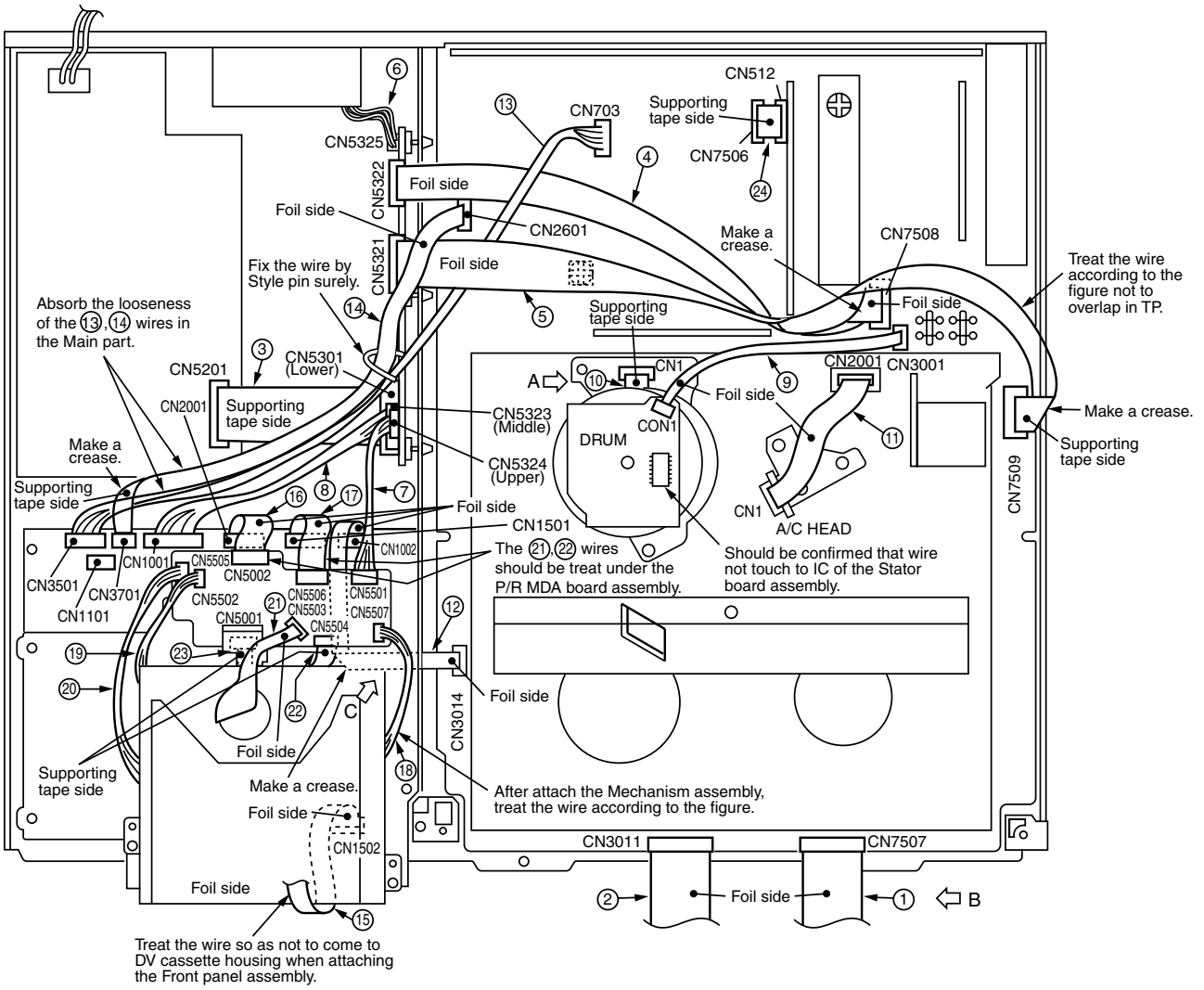



<Front panel assembly>

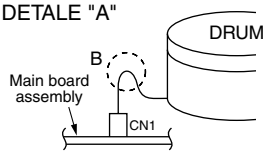
Fig. 1-9-1

## 1.10 CONNECTION

**TOP VIEW**

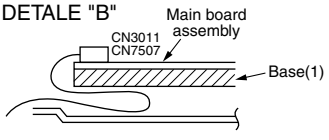



DETALE "A"



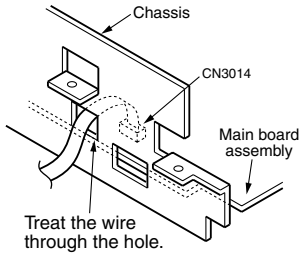

Absorb the looseness of the wire in the B part.

DETALE "B"




Treat the front wires according to the figure.

DETALE "C"




Treat the wire through the hole.

**[CAUTION]**

Insert the FPC wires as shown below.

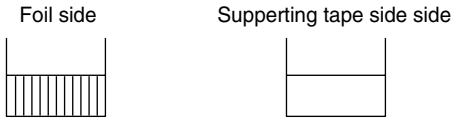



Fig. 1-10-1 Top view

| Fig. No. | Symbol | Connection | | | | | Pin No. | Type (FPC/ WIRE) |
|---|---|---|---|---|---|---|---|---|
| | | Connected point | | ⟷ | Connected point | | | |
| ① | WR1 | MAIN | CN7507 | ⟷ | JACK | CN7002 | 16 | FPC |
| ② | WR2 | MAIN | CN3011 | ⟷ | DISPLAY | CN7001 | 18 | FPC |
| ③ | WR3 | REGULATOR | CN5301 | ⟷ | SW REG | CN5201 | 19 | FPC |
| ④ | WR4 | REGULATOR | CN5322 | ⟷ | MAIN | CN7508 | 11 | FPC |
| ⑤ | WR5 | REGULATOR | CN5321 | ⟷ | MAIN | CN7509 | 15 | FPC |
| ⑥ | WR6 | REGULATOR | CN5325 | ⟷ | FAN MOTOR | – | 2 | WIRE |
| ⑦ | WR7 | REGULATOR | CN5324 | ⟷ | PRE/REC MDA | CN5501 | 5 | WIRE |
| ⑧ | WR8 | REGULATOR | CN5323 | ⟷ | DV MAIN | CN1001 | 10 | WIRE |
| ⑨ | WR9 | DRUM MOTOR | CON1 | ⟷ | MAIN | CN3001 | 5 | FPC |
| ⑩ | WR10 | MAIN | CN1 | ⟷ | UPPER DRUM | – | 13 | FPC |
| ⑪ | WR11 | A/C HEAD | CN1 | ⟷ | MAIN | CN2001 | 7 | FPC |
| ⑫ | WR12 | MAIN | CN3014 | ⟷ | DV MAIN | CN1002 | 6 | FPC |
| ⑬ | WR13 | MAIN | CN703 | ⟷ | DV MAIN | CN3501 | 6 | WIRE |
| ⑭ | WR14 | MAIN | CN2601 | ⟷ | DV MAIN | CN3701 | 8 | FPC |
| ⑮ | WR15 | DV MAIN | CN1502 | ⟷ | SENSOR | – | 15 | FPC |
| ⑯ | WR16 | PRE/REC MDA | CN5002 | ⟷ | DV MAIN | CN2001 | 26 | FPC |
| ⑰ | WR17 | PRE/REC MDA | CN5506 | ⟷ | DV MAIN | CN1501 | 20 | FPC |
| ⑱ | WR18 | PRE/REC MDA | CN5507 | ⟷ | DV HOUSING MOTOR | – | 4 | WIRE |
| ⑲ | WR19 | PRE/REC MDA | CN5502 | ⟷ | DV LOADING MOTOR | – | 2 | WIRE |
| ⑳ | WR20 | PRE/REC MDA | CN5505 | ⟷ | DV ENCODER | – | 4 | WIRE |
| ㉑ | WR21 | PRE/REC MDA | CN5503 | ⟷ | DV DRUM MOTOR | – | 11 | FPC |
| ㉒ | WR22 | PRE/REC MDA | CN5504 | ⟷ | DV CAPSTAN MOTOR | – | 18 | FPC |
| ㉓ | WR23 | PRE/REC MDA | CN5001 | ⟷ | DV VIDEO HEAD | – | 10 | FPC |
| ㉔ | – | MAIN | CN7506 | ⟷ | S-SUB | CN512 | 14 | FPC |
| – | – | DV MAIN | CN1101 | ⟷ | Jig CONN. CABLE | – | 26 | – |

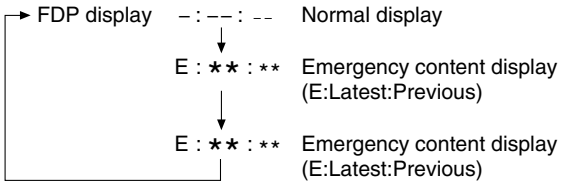
Table 1-10-1 Connection

## 1.11 EMERGENCY DISPLAY FUNCTION

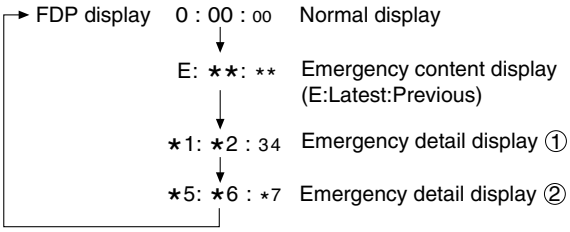
This unit has a function for storing the history of the past two emergencies (EMG) and displaying them on each FDP. With the status of the VCR and mechanism at the moment an emergency occurred can also be confirmed.

**FDP display switching**

**[DV]**




**[VHS]**




**Notes:**

- ***The emergency detail display ①② show the information on the latest emergency.***
  ***It becomes " – – : – – : – –" when there is no latest emergency record.***
- ***When using the Jig RCU, set its custom code to match the custom code of the VCR.***

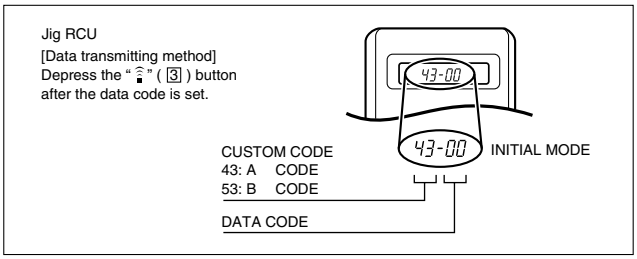
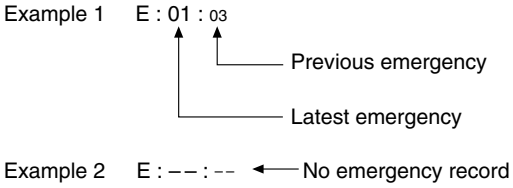



Fig. 1-11-1 Jig RCU [PTU94023B]

### 1.11.1 Displaying the emergency information

(1) Transmit the code "59" from the Jig RCU.
The FDP shows the emergency content in the form of "E:★★:★★".




**Note:**

**[DV]**

***For the emergency content, see "1.11.3 Emergency content description".***

**[VHS]**

***For the emergency content, see "1.11.3 Emergency content description".***

(2) Transmit the code "59" from the Jig RCU again.
The FDP shows the emergency detail information ① in the form of "★1 : ★2 : 34".

- ★1 : Deck operation mode at the moment of emergency
- ★2 : Mechanism operation mode at the moment of emergency
- 3– : Mechanism sensor information at the moment of emergency
- –4 : Mechanism mode position at the moment of emergency

**Note:**

- ***For the emergency detail information ①, see "1.11.4 Emergency detail information ①".***

(3) Transmit the code "59" from the Jig RCU once again.
The FDP shows the emergency detail information ② in the form of "★5 : ★6 : ★7".

- ★5 : Type of the cassette tape in use ①.
- ★6 : Winding position of the cassette tape in use
- ★7 : Type of the cassette tape in use ②(Winding area)

**Note:**

- ***For the emergency detail information ②, see "1.11.5 Emergency detail information ②".***

(4) Transmit the code "59" from the Jig RCU once again to reset the display.

### 1.11.2 Clearing the emergency history

(1) Display the emergency history.
(2) Transmit the code "36" from the Jig RCU.
(3) Reset the emergency display.

(Y292-03e)

### 1.11.3 Emergency content description

**Note:** ***Emergency contents "E08/E09" are for the model with Dynamic Drum (DD).***

| FDP | CONTENT | CAUSE |
|---|---|---|
| E01: Loading EMG | When the mechanism mode cannot be changed to another mode even when the loading motor has rotated for more than 4 seconds in the loading direction, [E:01] is identified and the power is turned off. | ① The mechanism is locked in the middle of mode transition.<br>② The mechanism is locked at the loading end due to the encoder position reading error during mode transition.<br>③ Power is not supplied to the loading MDA. |
| E02: Unloading EMG | When the mechanism mode cannot be changed to another mode even when the loading motor has rotated for more than 4 seconds in the unloading direction, [E:02] is identified and the power is turned off. | ① The mechanism is locked in the middle of mode transition.<br>② The mechanism is locked at the unloading end due to the encoder position reading error during mode transition.<br>③ Power is not supplied to the loading MDA. |
| E03: Take Up Reel Pulse EMG | When the take-up reel pulse has not been generated for more than 4 seconds in the capstan rotating mode, [E:03] is identified, the pinch rollers are turned off and stopped, and the power is turned off. However, the reel EMG is not detected in STILL/SLOW modes. | ① The take-up reel pulse is not generated in the FWD transport modes (PLAY/FWD SEARCH/FF, etc.) because;<br>1) The idler gear is not meshed with the take-up reel gear;<br>2) The idler gear is meshed with the take-up reel gear, but incapable of winding due to too large mechanical load (abnormal tension);<br>3) The take-up reel sensor does not output the FG pulse.<br>② The supply reel pulse is not generated in the REV transport modes (REV SEARCH/REW, etc.) because;<br>1) The idler gear is not meshed with the supply reel gear.<br>2) The idler gear is meshed with the supply reel gear, but incapable of winding due to too large a mechanical load (abnormal tension);<br>3) The supply reel sensor does not output the FG pulse.<br>③ Power is not supplied to the reel sensors. |
| E04: Drum FG EMG | When the drum FG pulse has not been input for more than 3 seconds in the drum rotating mode, [E:04] is identified, the pinch rollers are turned off and stopped, and the power is turned off. | ① The drum could not start or the drum rotation has stopped due to too large a load on the tape, because;<br>1) The tape tension is abnormally high;<br>2) The tape is damaged or a foreign object (grease, etc.) adheres to the tape.<br>② The drum FG pulse did not reach the System controller CPU because;<br>1) The signal circuit is disconnected in the middle;<br>2) The FG pulse generator (hall device) of the drum is faulty.<br>③ The drum control voltage (DRUM CTL V) is not supplied to the MDA.<br>④ Power is not supplied to the drum MDA. |
| E05: Cassette Eject EMG | When the eject operation does not complete in 3 seconds after the start, [E:05] is identified, the pinch rollers are turned off and stopped, and the power is turned off. When the cassette insertion operation does not complete in 3 seconds after the start, the cassette is ejected. In addition, when the operation does not complete within 3 seconds after the start, [E:05] is also identified and the power is turned off immediately. | ① The cassette cannot be ejected due to a failure in the drive mechanism of the housing.<br>② When the housing load increases during ejection, the loading motor is stopped because of lack of headroom in its drive torque.<br>Housing load increasing factors: Temperature environment (low temperature, etc.), mechanism wear or failure.<br>③ The sensor/switch for detecting the end of ejection are not functioning normally.<br>④ The loading motor drive voltage is lower than specified or power is not supplied to the motor (MDA).<br>⑤ When the user attempted to eject a cassette, a foreign object (or perhaps the user's hand) was caught in the opening of the housing. |
| E06: Capstan FG EMG | When the capstan FG pulse has not been generated for more than 1 second in the capstan rotating mode, [E:06] is identified, the pinch rollers are turned off and stopped, and the power is turned off.However, the capstan EMG is not detected in STILL/SLOW/FF/REW modes. | ① The capstan could not start or the capstan rotation has stopped due to too large a load on the tape, because;<br>1) The tape tension is abnormally high (mechanical lock);<br>2) The tape is damaged or a foreign object (grease, etc.) is adhered to the tape (occurrence of tape entangling, etc.).<br>② The capstan FG pulse did not reach the System controller CPU because;<br>1) The signal circuit is disconnected in the middle;<br>2) The FG pulse generator (MR device) of the capstans is faulty.<br>③ The capstan control voltage (CAPSTAN CTL V) is not supplied to the MDA.<br>④ Power is not supplied to the capstan MDA. |
| E07: SW Power Short-Circuit EMG | When short-circuiting of the SW power supply with GND has lasted for 0.5 second or more, [E:07] is identified, all the motors are stopped and the power is turned off. | ① The SW 5 V power supply circuit is shorted with GND.<br>② The SW 12 V power supply circuit is shorted with GND. |
| E08: DD Initialized (Absolute Position Sensor) EMG | When DD tilting does not complete in 4 seconds, [E:08] is identified, the tilt motor is stopped and the power is turned off. | ① The absolute value sensor is defective. (The soldered parts have separated.)<br>② The pull-up resistor at the absolute sensor output is defective. (The soldered parts have separated.)<br>③ Contact failure or soldering failure of the pins of the connector (board-to-board) to the absolute value sensor.<br>④ The absolute value sensor data is not sent to the System Controller CPU. |
| E09: DD FG EMG | When the DD FG pulse is not generated within 2.5 seconds, [E:09] is identified, the tilt motor is stopped and the power is turned off. | ① The FG sensor is defective. (The soldered parts have separated.)<br>② The pull-up resistor at the FG sensor output is defective. (The soldered parts have separated.)<br>③ Contact failure or soldering failure of the pins of the connector (board-to-board) to the FG sensor.<br>④ The power to the sensor is not supplied. (Connection failure/soldering failure)<br>⑤ The FG pulse is not sent to the System Controller CPU.<br>⑥ The tilt motor is defective. (The soldered parts have separated.)<br>⑦ The drive power to the tilt motor is not supplied. (Connection failure/soldering failure)<br>⑧ The tilt motor drive MDA - IC is defective.<br>⑨ Auto-recovery of the DD tilting cannot take place due to overrun. |
| E0A: Supply Reel Pulse EMG | When the supply reel pulse has not been generated for more than 10 seconds in the capstan rotating mode, [E:0A] is identified and the cassette is ejected (but the power is not turned off). However, note that the reel EMG is not detected in the SLOW/STILL mode. | ① The supply reel pulse is not generated in the FWD transport mode (PLAY/FWD SEARCH/FF, etc.) because;<br>1) PLAY/FWD or SEARCH/FF is started while the tape in the inserted cassette is cut in the middle;<br>2) A mechanical factor caused tape slack inside and outside the supply reel side of the cassette shell. In this case, the supply reel will not rotate until the tape slack is removed by the FWD transport, so the pulse is not generated until then;<br>3) The FG pulse output from the supply reel sensor is absent.<br>② The take-up reel pulse is not generated in the REV transport mode (REV SEARCH/REW, etc.).<br>1) REV SEARCH/REW is started when the tape in the inserted cassette has been cut in the middle;<br>2) A mechanical factor caused tape slack inside and outside the take-up reel side of the cassette shell. In this case, the supply reel will not rotate until the tape slack is removed by the REV transport, so the pulse will not be generated until that time;<br>3) The FG pulse output from the take-up reel sensor is absent.<br>③ The power to a reel sensor is not supplied. |
| EC1 or EU1: Head clog warning | Presupposing the presence of the control pulse output in the PLAY mode, when the value obtained by mixing the two V.FM output channels (without regard to the A.FM output) has remained below a certain threshold level for more than 10 seconds, [E:C1] or [E:U1] is identified and recorded in the emergency history. During the period in which a head clog is detected, the FDP and OSD repeat the "3-second warning display" and "7-second noise picture display" alternately.<br>EMG code : "E:C1" or "E:U1" / FDP : "U:01" / OSD : "Try cleaning tape." or "Use cleaning cassette."<br>The head clog warning is reset when the above-mentioned threshold has been exceeded for more than 2 seconds or the mode is changed to another mode than PLAY. | |

Table 1-11-1

### 1.11.4 Emergency detail information ①

The status (electrical operation mode) of the VCR and the status (mechanism operation mode/sensor information) of the mechanism in the latest emergency can be confirmed based on the figure in EMG detail information ①.

**[FDP display]**

∗1 : ∗2 : 34

∗1 : Deck operation mode at the moment of emergency
∗2 : Mechanism operation mode at the moment of emergency
3– : Mechanism sensor information at the moment of emergency
–4 : Mechanism mode position at the moment of emergency

**Note:**

- ***In the Deck operation mode/Mechanism operation mode/ Mechanism mode position, the contents of the code that is shown on the FDP differs depending on the parts number of the System Control microprocessor (IC3001) of the VCR.***
  ***For the microprocessor parts number that starts with the two letters "MN", refer to the Table of MN and for parts number with "HD", refer to the Table of HD.***

**∗1 : Deck Operation Mode**
**[Table of MN]**

| Display | Deck Operation Mode |
|---|---|
| 00 | Mechanism being initialized |
| 01 | STOP with pinch roller pressure off (or tape present with P.OFF) |
| 02 | STOP with pinch roller pressure on |
| 03 | POWER OFF as a result of EMG |
| 04 | PLAY |
| 0C | REC |
| 10 | Cassette ejected |
| 20 | FF |
| 21 | Tape fully loaded, START sensor ON, short FF |
| 22 | Cassette identification FWD SEARCH before transition to FF (SP x7-speed) |
| 24 | FWD SEARCH (variable speed) including x2-speed |
| 2C | INSERT REC |
| 40 | REW |
| 42 | Cassette identification REV SEARCH before transition to REW (SP x7-speed) |
| 44 | REV SEARCH (variable speed) |
| 4C | AUDIO DUB |
| 6C | INSERT REC (VIDEO + AUDIO) |
| 84 | FWD STILL/SLOW |
| 85 | REV STILL/SLOW |
| 8C | REC PAUSE |
| 8D | Back spacing |
| 8E | Forward spacing (FWD transport mode with BEST function) |
| AC | INSERT REC PAUSE |
| AD | INSERT REC Back spacing |
| CC | AUDIO DUB PAUSE |
| CD | AUDIO DUB Back spacing |
| EC | INSERT REC (VIDEO + AUDIO) PAUSE |
| ED | INSERT REC (VIDEO + AUDIO) Back spacing |

**[Table of HD]**

| Display | Deck Operation Mode |
|---|---|
| 00 | STOP with pinch roller pressure off (or tape present with P.OFF) |
| 01 | STOP with pinch roller pressure on |
| 04 | PLAY |
| 0E | REC |
| 11 | Cassette ejected |
| 22 | FF |
| 26 | FWD SEARCH (variable speed) including x2-speed |
| 2E | INSERT REC |
| 43 | REW |
| 47 | REV SEARCH (variable speed) |
| 4C | AUDIO DUB |
| 6E | INSERT REC (VIDEO+AUDIO) |
| 84 | FWD STILL/SLOW |
| 85 | REV STILL/SLOW |
| 8F | REC PAUSE |
| AF | INSERT REC PAUSE |
| CD | AUDIO DUB PAUSE |
| EF | INSERT REC (VIDEO+AUDIO) PAUSE |

**∗2 : Mechanism Operation Mode**
**[Table of MN]**

| Display | Mechanism Operation Mode |
|---|---|
| 00 | Command standby (Status without executing command) |
| 02 | POWER OFF by EMG occurrence |
| 04 | Moving to the adjacent position in the LOAD direction |
| 06 | Moving to the adjacent position in the UNLOAD direction |
| 08 | Cassette ejection being executed |
| 0A | Cassette insertion being executed |
| 0C | Tape being loaded |
| 0E | Tape being unloaded |
| 10 | Mode transition to STOP with pinch roller compression ON |
| 12 | Mode transition to STOP with pinch roller compression OFF |
| 14 | Mode transition to STOP with pinch roller compression OFF as a result of POWER OFF |
| 16 | Mode transition to STOP with pinch roller compression ON as a result of POWER ON |
| 18 | Mode transition to PLAY |
| 1A | Mode transition to FWD SEARCH |
| 1C | Mode transition to REC |
| 1E | Mode transition to FWD STILL/SLOW |
| 20 | Mode transition to REV STILL/SLOW |
| 22 | Mode transition to REV SEARCH |
| 24 | Mode transition from FF/REW to STOP |
| 26 | Mode transition to FF |
| 28 | Mode transition to REW |
| 2A | 4 sec. of REV as a result of END sensor going ON during loading |
| 2C | Short FF/REV as a result of tape sensor going ON during unloading |
| 2E | Mechanism position being corrected due to overrun |
| 80 | Mechanism in initial position (Dummy command) |

**[Table of HD]**

| Display | Mechanism Operation Mode |
|---|---|
| 00 | STOP with pinch roller pressure off |
| 01 | STOP with pinch roller pressure on |
| 02 | U/L STOP (or tape being loaded) |
| 04 | PLAY |
| 05 | PLAY (x1-speed playback using JOG) |
| 0E | REC |
| 11 | Cassette ejected |
| 22 | FF |
| 26 | FWD SEARCH (variable speed) including x2-speed |
| 2E | INSERT REC |
| 43 | REW |
| 47 | REV SEARCH |
| 4C | AUDIO DUB |
| 6E | INSERT REC (VIDEO + AUDIO) |
| 84 | FWD STILL/SLOW |
| 85 | REV STILL/SLOW |
| 8F | REC PAUSE |
| AF | INSERT REC PAUSE |
| C7 | REV SEARCH (x1-speed reverse playback using JOG) |
| CD | AUDIO DUB PAUSE |
| EF | INSERT REC (VIDEO + AUDIO) PAUSE |
| F0 | Mechanism being initialized |
| F1 | POWER OFF as a result of EMG |
| F2 | Cassette being inserted |
| F3 | Cassette being ejected |
| F4 | Transition from STOP with pinch roller pressure on to STOP with pinch roller pressure off |
| F5 | Transition from STOP with pinch roller pressure on to PLAY |
| F6 | Transition from STOP with pinch roller pressure on to REC |
| F7 | Cassette type detection SEARCH before FF/REW is being executed |
| F8 | Tape being unloaded |
| F9 | Transition from STOP with pinch roller pressure off to STOP with pinch roller pressure on |
| FA | Transition from STOP with pinch roller pressure off to FF/REW |
| FB | Transition from STOP with pinch roller pressure off to REC.P (T.REC,etc.) |
| FC | Transition from STOP with pinch roller pressure off to cassette type detection SEARCH |
| FD | Short REV being executed after END sensor on during unloading |
| FE | Tension loosening being executed after tape loading (STOP with pinch roller pressure on) |

### 3– : Mechanism Sensor Information
**[Common table of MN and HD]**

| Display | Mechanism Sensor Information | | | |
|---|---|---|---|---|
| | S-VHS SW | REC SAFETY SW | START SENSOR | END SENSOR |
| 0– | VHS | Tab broken | ON | ON |
| 1– | VHS | Tab broken | ON | OFF |
| 2– | VHS | Tab broken | OFF | ON |
| 3– | VHS | Tab broken | OFF | OFF |
| 4– | VHS | Tab present | ON | ON |
| 5– | VHS | Tab present | ON | OFF |
| 6– | VHS | Tab present | OFF | ON |
| 7– | VHS | Tab present | OFF | OFF |
| 8– | S-VHS | Tab broken | ON | ON |
| 9– | S-VHS | Tab broken | ON | OFF |
| A– | S-VHS | Tab broken | OFF | ON |
| B– | S-VHS | Tab broken | OFF | OFF |
| C– | S-VHS | Tab present | ON | ON |
| D– | S-VHS | Tab present | ON | OFF |
| E– | S-VHS | Tab present | OFF | ON |
| F– | S-VHS | Tab present | OFF | OFF |

### –4 : Mechanism Mode Position
**[Table of MN]**

| Display | Mechanism Mode Position |
|---|---|
| -0 | Initial value |
| -1 | EJECT position |
| -2 | Housing operating |
| -3 | U/L STOP position |
| -4 | Tape being loaded/unloaded (When the pole base is located on the front side of the position just beside the drum) |
| -5 | Tape being loaded/unloaded (When the pole base is located on the rear side of the position just beside the drum) |
| -6 | Pole base compressed position |
| -7 | FF/REW position |
| -8 | Between FF/REW and STOP with pinch roller compression ON |
| -9 | STOP with pinch roller compression OFF |
| -A | Between STOP with pinch roller compression OFF and REV |
| -B | REV (REV STILL/SLOW) position |
| -C | Between REV and FWD |
| -D | FWD (FWD STILL/SLOW) position |
| -E | Between FWD and PLAY |
| -F | PLAY position |

**[Table of HD]**

| Display | Mechanism Mode Position |
|---|---|
| –0 | EJECT position |
| –1 | U/L STOP position |
| –2 | Tape being loaded/unloaded (When the pole base is located on the rear side of the position just beside the drum) |
| –3 | FF/REW position |
| –4 | STOP with pinch roller pressure off |
| –5 | REV (REV STILL/SLOW) position |
| –6 | FWD (FWD STILL/SLOW) position, PLAY position |
| –7 | Intermediate position during transition between other mechanism modes |

**Note:**
- ***As the display is always "–7" at any intermediate position between mechanism modes, the position of transitory EMG may sometimes not be locatable.***

### 1.11.5 Emergency detail information ②

The type of the cassette tape and the cassette tape winding position can be confirmed based on the figure in EMG detail information ②.

**[FDP display]**

∗5 : ∗6 : ∗7

∗5 : Type of the cassette tape in use ①
∗6 : Winding position of the cassette tape in use
∗7 : Type of the cassette tape in use ②(Winding area)

**Note:**
- ***EMG detail information② is the reference information stored using the remaining tape detection function of the cassette tape. As a result, it may not identify cassette correctly when a special cassette tape is used or when the tape has variable thickness.***

#### ∗5 : Cassette tape type ①

| Display | Cassette Tape Type ① |
|---|---|
| 00 | Cassette type not identified |
| 16 | Large reel/small reel (T-0 to T-15/T-130 to T-210) not classified |
| 82 | Small reel, thick tape (T-120) identified/thin tape (T-140) identified |
| 84 | Large reel (T-0 to T-60) identified |
| 92 | Small reel, thick tape (T-130) identified/thin tape (T-160 to T-210) identified |
| 93 | Small reel, thick tape/C cassette (T-0 to T-100/C cassette) not classified |
| C3 | Small reel, thick tape/C cassette (T-0 to T-100/C cassette) being classified |
| D3 | Small reel, thick tape/C cassette (T-0 to T-100/C cassette) being classified |
| E1 | C cassette, thick tape (TC-10 to TC-20) identified |
| E2 | Small reel, thick tape (T-0 to T-100) identified |
| E9 | C cassette, thin tape (TC-30 to TC-40) identified |
| F1 | C cassette, thick tape/thin tape (TC-10 to TC-40) not classified |

**Notes:**
- ***Cassette tape type ① is identified a few times during mode transition and the identification count is variable depending on the cassette tape type. If an EMG occurs in the middle of identification, the cassette tape type may not be able to be identified.***
- ***If other value than those listed in the above table is displayed, the cassette tape type is not identified.***

#### ∗6 : Cassette tape winding position

The cassette tape winding position at the moment of EMG is displayed by dividing the entire tape (from the beginning to the end) in 22 sections using a hex number from "00" to "15".

"00" : End of winding
"15" : Beginning of winding
"FF" : Tape position not identified

#### ∗7 : Cassette tape type ② (Winding area)

| Display | Cassette Tape Type ② | |
|---|---|---|
| 00 | Cassette type not identified | |
| 07 | Small reel, thick tape | T-5 |
| 08 - 0E | C cassette, thick tape | TC-10 |
| 09 - 15 | C cassette, thick tape | TC-20P |
| 0A - 0B | Small reel, thick tape | T-20 |
| 0A - 16 | C cassette, thin tape | TC-30 |
| 0A - 16 | C cassette, thin tape | TC-40 |
| 0D - 0F | Small reel, thick tape | T-40 |
| 11 - 14 | Small reel, thick tape | T-60 |
| 15 - 18 | Small reel, thick tape | T-80/DF-160 |
| 17 - 1A | Small reel, thick tape | T-80/DF-180 |
| 19 - 1D | Small reel, thick tape | T-100 |
| 1D - 21 | Small reel, thick tape | T-120/DF-240 |
| 1E - 1F | Small reel, thin tape | T-140 |
| 1F - 23 | Small reel, thick tape | T-130 |
| 21 - 23 | Small reel, thin tape | T-160 |
| 21 - 23 | Small reel, thin tape | T-168 |
| 22 - 24 | Small reel, thick tape | DF-300 |
| 22 - 24 | Small reel, thin tape | T-180/DF-380 |
| 22 - 24 | Small reel, thin tape | T-210/DF-420 |
| 22 - 23 | Large reel | T-5 |
| 23 - 24 | Large reel | T-10 |
| 25 - 26 | Large reel | T-20 |
| 27 - 29 | Large reel | T-30 |
| 29 - 2B | Large reel | T-40 |
| 2D - 2F | Large reel | T-60 |

**Note:**
- ***The values of cassette tape type ② in the above table are typical values with representative cassette tapes.***

# SECTION 2
# MECHANISM ADJUSTMENT (VHS)

## 2.1 BEFORE STARTING REPAIR AND ADJUSTMENT

### 2.1.1 Precautions

(1) Unplug the power cable of the main unit before using your soldering iron.
(2) Take care not to cause any damage to the conductor wires when plugging and unplugging the connectors.
(3) Do not randomly handle the parts without identifying where the trouble is.
(4) Exercise enough care not to damage the lugs, etc. during the repair work.
(5) When installing the front panel assembly, be sure to hook the lug on the back side of the cassette door to the door opener of the cassette holder. If this operation is neglected it will not be possible to remove the cassette when ejecting because the housing door cannot be opened.

### 2.1.2 Checking for Proper Mechanical Operations

Enter the mechanism service mode when you want to operate the mechanism when no cassette is loaded. (See 1.5 MECHANISM SERVICE MODE.)

### 2.1.3 Manually Removing the Cassette Tape

**1. In case of electrical failures**

If you cannot remove the cassette tape which is loaded because of any electrical failure, manually remove it by taking the following steps.

(1) Unplug the power cable and remove the top cover, bracket and front panel assembly. (See 1.3 DISASSEMBLY/ASSEMBLY METHOD.)
(2) Unload the cassette by manually turning the loading motor of the mechanism assembly toward the front. In doing so, hold the tape by the hand to keep the slack away from any grease. (See Fig.2-1-3a.)
(3) Bring the pole base assembly (supply or take-up side) to a pause when it reaches the position where it is hidden behind the cassette tape.
(4) Move the top guide toward the drum while holding down the lug Ⓐ of the bracket retaining the top guide. Likewise hold part Ⓑ down and remove the top guide. Section Ⓒ of the top guide is then brought under the cassette lid. Then remove the top guide by pressing the whole cassette tape down. (See Fig.2-1-3b.)
(5) Remove the cassette tape by holding both the slackened tape and the cassette lid.
(6) Take up the slack of the tape into the cassette. This completes removal of the cassette tape.

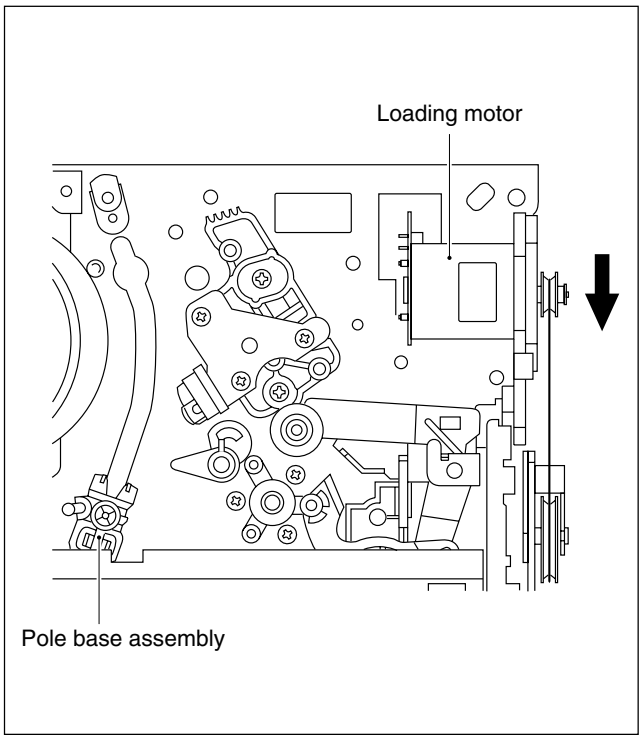



Fig. 2-1-3a

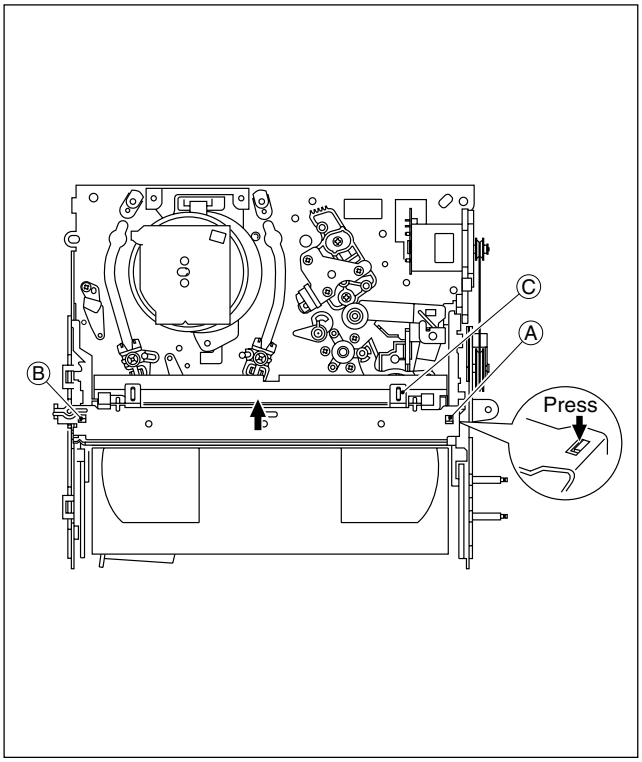



Fig. 2-1-3b

**2. In case of mechanical failure**

If you cannot remove the cassette tape which is loaded because of any mechanical failure, manually remove it by taking the following steps.

(1) Unplug the power cable and remove the top cover, front panel assembly and others so that the mechanism assembly is visible. (See 1.3 DISASSEMBLY/ASSEMBLY METHOD.)
(2) While keeping the tension arm assembly of the mechanism assembly free from tension, pull the tape on the pole base assembly (supply or take-up side) out of the guide roller. (See Fig.2-1-3c.)
(3) Take the spring of the pinch roller arm assembly off the hook of the press lever assembly, and detach it from the tape. (See Fig.2-1-3d.)
(4) In the same way as in the electrical failure instructions in 2.1.3-1(4), remove the top guide.
(5) Raise the cassette tape cover. By keeping it in that position, draw out the cassette tape case from the cassette holder and take out the tape.
(6) By hanging the pinch roller arm assembly spring back on the hook, take up the slack of the tape into the cassette.

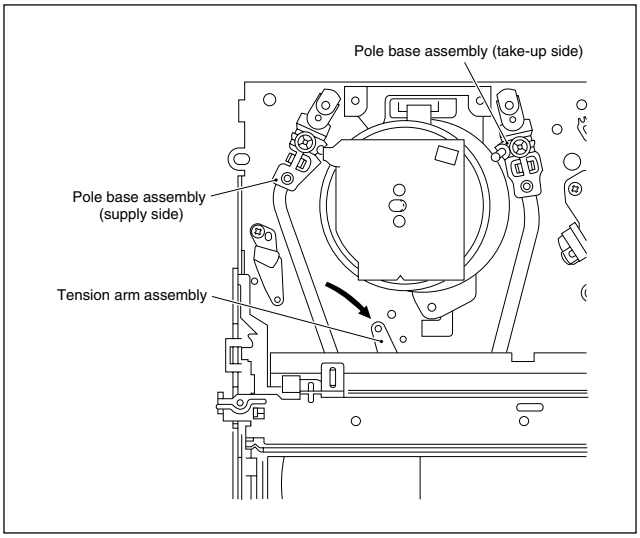



Fig. 2-1-3c

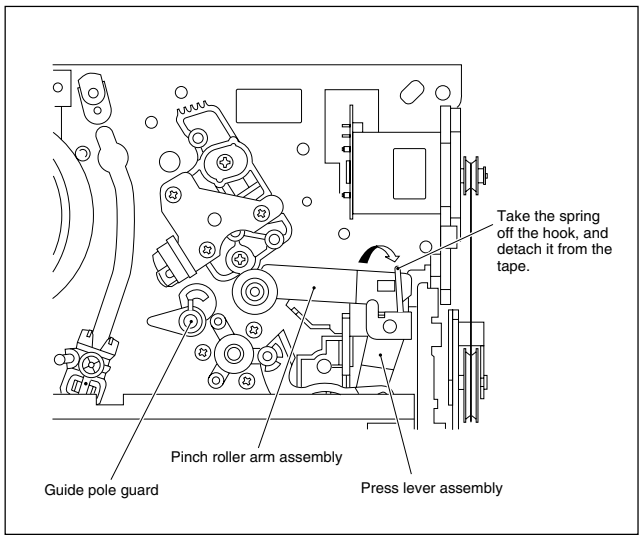
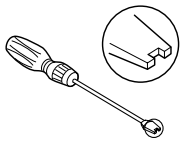
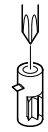
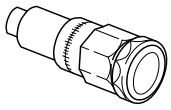
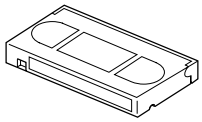
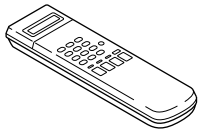
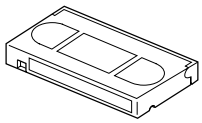
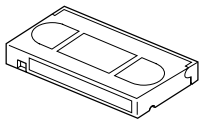



Fig. 2-1-3d

### 2.1.4 Jigs and Tools Required for Adjustment

| Roller driver PTU94002 | A/C head positioning tool PTU94010 | Torque gauge PUJ48075-2 |
|---|---|---|
|  |  |  |
| **Back tension cassette gauge PUJ48076-2** | **Jig RCU PTU94023B** | |
|  |  | |
| **Alignment tape (SP, stairstep, NTSC) MHP** | **Alignment tape (LP, stairstep, NTSC) MHP-L** | |
|  |  | |

### 2.1.5 Maintenance and Inspection

**1. Location of major mechanical parts**

In this chapter, the two mechanism speeds are described by comparing the speeds of the standard type and the high-speed FF/REW type.
It is possible to distinguish between these two types of mechanism by the diameters of their capstan pulleys.
The capstan pulley diameter for the standard type is approx. 32 mm.
The capstan pulley diameter for the high-speed FF/REW type is approx. 43 mm.
For information on the different parts used in the two mechanism types, please refer to the “Replacement of major parts”.

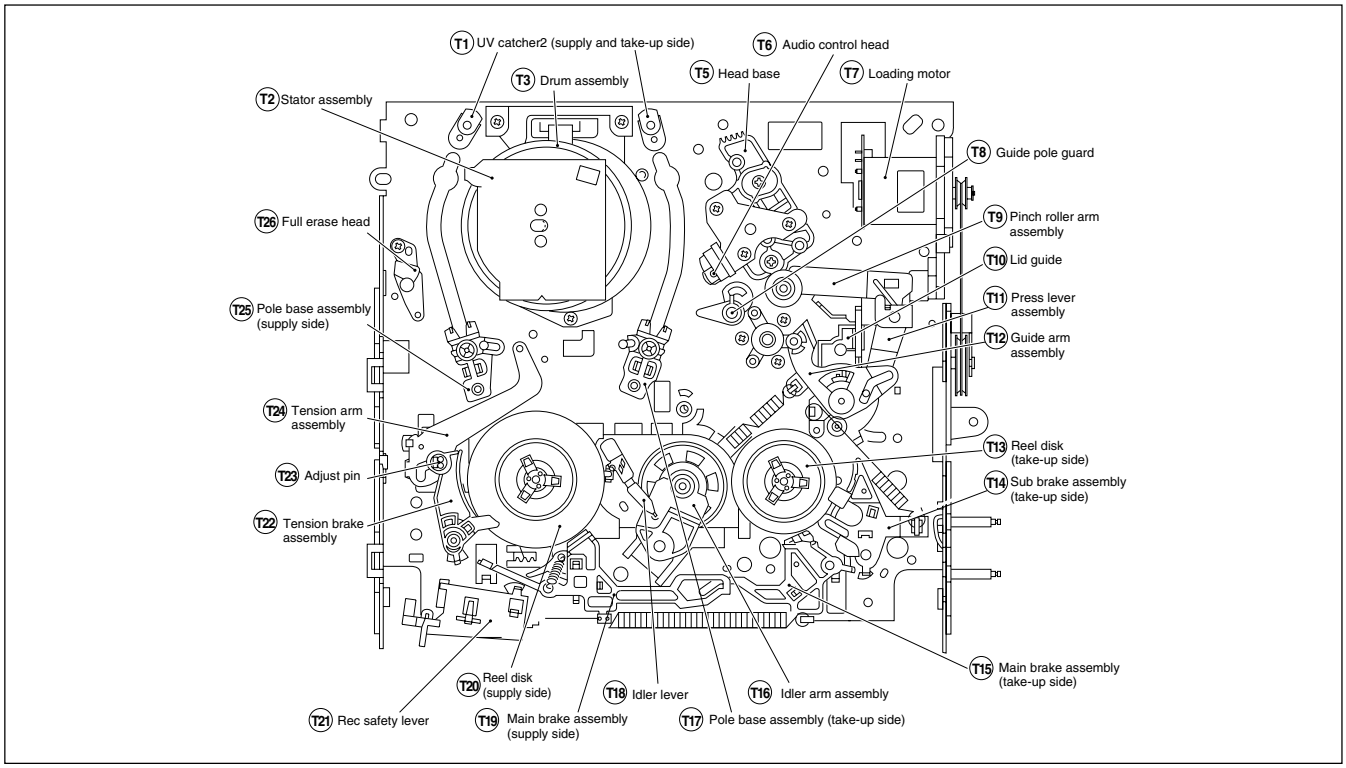

T1 UV catcher2 (supply and take-up side)
T6 Audio control head
T3 Drum assembly
T5 Head base
T7 Loading motor
T2 Stator assembly
T8 Guide pole guard
T26 Full erase head
T9 Pinch roller arm assembly
T10 Lid guide
T25 Pole base assembly (supply side)
T11 Press lever assembly
T12 Guide arm assembly
T24 Tension arm assembly
T13 Reel disk (take-up side)
T23 Adjust pin
T14 Sub brake assembly (take-up side)
T22 Tension brake assembly
T15 Main brake assembly (take-up side)
T20 Reel disk (supply side)
T18 Idler lever
T16 Idler arm assembly
T21 Rec safety lever
T19 Main brake assembly (supply side)
T17 Pole base assembly (take-up side)

Fig. 2-1-5a Mechanism assembly top side

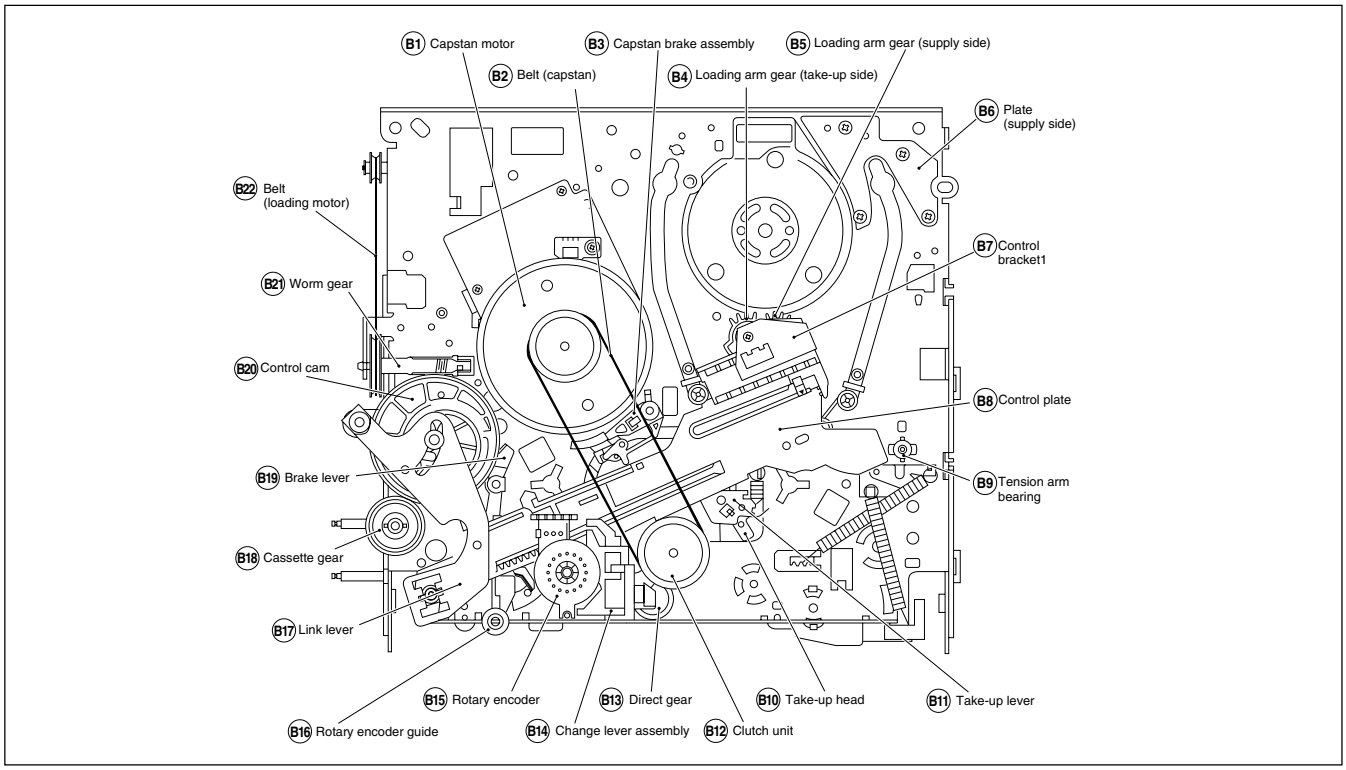



Fig. 2-1-5b Mechanism assembly bottom side

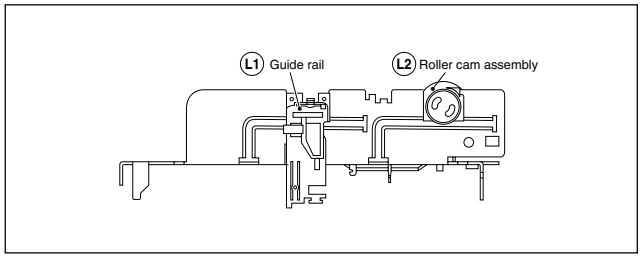



Fig. 2-1-5c Mechanism assembly left side

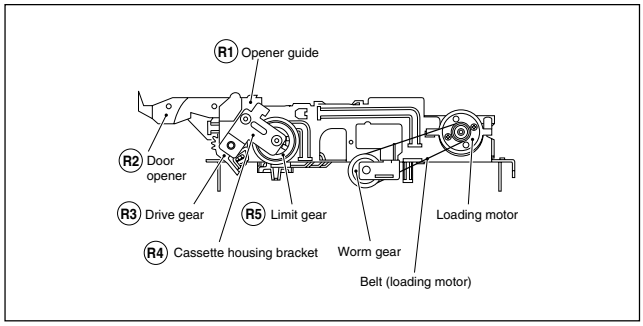



Fig. 2-1-5d Mechanism assembly right side

**2. Cleaning**

Regular cleaning of the transport system parts is desirable but practically impossible. So make it a rule to carry out cleaning of the tape transport system whenever the machine is serviced.

When the video head, tape guide and/or brush get soiled, the playback picture may appear inferior or at worst disappear, resulting in possible tape damage.

(1) When cleaning the upper drum (especially the video head), soak a piece of closely woven cloth or Kimu-wipe with alcohol and while holding the cloth onto the upper drum by the fingers, turn the upper drum counterclockwise.

**Note:**

- ***Absolutely avoid sweeping the upper drum vertically as this will cause damage to the video head.***

(2) To clean the parts of the tape transport system other than the upper drum, use a piece of closely woven cloth or a cotton swab soaked with alcohol.

(3) After cleaning, make sure that the cleaned parts are completely dry before using the video tape.

**3. Lubrication**

With no need for periodical lubrication, you have only to lubricate new parts after replacement. If any oil or grease on contact parts is soiled, wipe it off and newly lubricate the parts.

**Note:**

- ***See the "mechanism assembly" diagram of the parts list for the lubricating or greasing spots, and for the types of oil or grease to be used.***

**4. Suggested servicing schedule for main components**

The following table indicates the suggested period for such service measures as cleaning,lubrication and replacement. In practice, the indicated periods will vary widely according to environmental and usage conditions.However, the indicated components should be inspected when a set is brought for service and the maintenance work performed if necessary. Also note that rubber parts may deform in time,even if the set is not used.

| System | Parts Name | Operation Hours | |
|---|---|---|---|
| | | ~1000H | ~2000H |
| Tape transport | Upper drum assembly | ★○ | ○ |
| | A/C head | ★○ | ★○ |
| | Lower drum assembly | ★ | ★○ |
| | Pinch roller arm assembly | ★ | ★ |
| | Full erase head | ★ | ★ |
| | Tension arm assembly | ★ | ★ |
| | Capstan motor (Shaft) | ★ | ★ |
| | Guide arm assembly | ★ | ★ |
| Drive | Capstan motor | | ○ |
| | Capstan brake assembly | | ○ |
| | Main brake assembly | | ○ |
| | Belt (Capstan) | ○ | ○ |
| | Belt (Loading motor) | | ○ |
| | Loading motor | | ○ |
| | Clutch unit | | ○ |
| | Worm gear | | ○ |
| | Control plate | | ○ |
| Other | Brush | ★○ | ★○ |
| | Tension brake assembly | ○ | ○ |
| | Rotary encoder | | ○ |

★ : Cleaning

○ : Inspection or Replacement if necessary

Table 2-1-5a

**5. Disassembling procedure table**

The following table indicates the order in which parts are removed for replacement. To replace parts, remove them in the order of 1 to 18 as shown in the table. To install them, reverse the removal sequence.

The symbols and numbers preceding the individual part names represent the numbers in the "Location of major mechanical parts" table. Also, the "T", "B", and "T/B" on the right of each part name shows that the particular part is removed from the front, from the back, and from both sides of the mechanism, respectively.

| Symbols and numbers | Removal parts / (Reference items) Replacement parts | Front (T)/Back (B) of mechanism | Number of removal steps | L1 Guide rail | L2 Roller cam assembly | R4 Cassette housing bracket | R1 Opener guide | — Relay gear | — Cassette holder assembly | R3 Drive gear | — Drive arm | T9 Pinch roller arm assembly | T12 Guide arm assembly | T11 Press lever assembly | T1 UV catcher2 | B15 Rotary encoder | B12 Clutch unit | B14 Change lever assembly | B13 Direct gear | — Coupling gear | B17 Link lever | B21 Worm gear | B7 Control bracket1 | B8 Control plate | B5 Loading arm gear (supply side) | B4 Loading arm gear (take-up side) | B11 Take-up lever | T14 Sub brake assembly (take-up side) | T15 Main brake assembly (take-up side) | T13 Reel disk (take-up side) | T22 Tension brake assembly | T24 Tension arm assembly | T18 Idler lever | B19 Brake lever (*1) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L1 | 2.2.3 Guide rail | T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L2 | 2.2.3 Roller cam assembly | T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R4 | 2.2.3 Cassette housing bracket | T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R1 | 2.2.3 Opener guide | T | 2 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R2 | 2.2.3 Door opener | T | 3 | | | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | 2.2.3 Relay gear | T | 3 | | | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R5 | 2.2.3 Limit gear | T | 3 | | | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | 2.2.3 Cassette holder assembly | T | 6 | 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R3 | 2.2.3 Drive gear | T | 4 | | | 1 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | 2.2.3 Drive arm | T | 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| T9 | 2.2.4 Pinch roller arm assembly | T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T12 | 2.2.5 Guide arm assembly | T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T11 | 2.2.5 Press lever assembly | T | 3 | | | | | | | | | 1 | 2 | | | | | | | | | | | | | | | | | | | | | |
| T6 | 2.2.6 A/C head | T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T7 | 2.2.7 Loading motor | T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B1 | 2.2.8 Capstan motor | T/B | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T1 | 2.2.9 UV catcher2 | T | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T17 | 2.2.9 Pole base assembly (take-up side) | T/B | 2 | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| T25 | 2.2.9 Pole base assembly (supply side) | T/B | 2 | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | |
| B15 | 2.2.10 Rotary encoder | B | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B12 | 2.2.11 Clutch unit | B | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B14 | 2.2.12 Change lever assembly | B | 3 | | | | | | | | | | | | | 1 | 2 | | | | | | | | | | | | | | | | | |
| B13 | 2.2.12 Direct gear | B | 4 | | | | | | | | | | | | | 1 | 2 | 3 | | | | | | | | | | | | | | | | |
| — | 2.2.12 Coupling gear | B | 5 | | | | | | | | | | | | | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | |
| — | 2.2.12 Clutch gear | B | 6 | | | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | |
| B17 | 2.2.13 Link lever | B | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B18 | 2.2.14 Cassette gear | B | 2 | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| B20 | 2.2.14 Control cam | B | 2 | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| B21 | 2.2.14 Worm gear | B | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T10 | - Lid guide | T/B | 5 | | | | | | | | | 1 | 2 | 3 | | | | | | | | 4 | | | | | | | | | | | | |
| B7 | 2.2.15 Control bracket1 | B | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B8 | 2.2.15 Control plate | B | 6 | | | | | | | | | | | | | 1 | 2 | 3 | | | 4 | | 5 | | | | | | | | | | | |
| B5 | 2.2.16 Loading arm gear (supply side) | B | 7 | | | | | | | | | | | | | 1 | 2 | 3 | | | 4 | | 5 | 6 | | | | | | | | | | |
| B4 | 2.2.16 Loading arm gear (take-up side) | B | 8 | | | | | | | | | | | | | 1 | 2 | 3 | | | 4 | | 5 | 6 | 7 | | | | | | | | | |
| — | 2.2.16 Loading arm gear shaft | B | 9 | | | | | | | | | | | | | 1 | 2 | 3 | | | 4 | | 5 | 6 | 7 | 8 | | | | | | | | |
| B11 | 2.2.17 Take-up lever | T/B | 7 | | | | | | | | | | | | | 1 | 2 | 3 | | | 4 | | 5 | 6 | | | | | | | | | | |
| B10 | 2.2.17 Take-up head | T/B | 8 | | | | | | | | | | | | | 1 | 2 | 3 | | | 4 | | 5 | 6 | | | 7 | | | | | | | |
| — | 2.2.17 Control plate guide | T/B | 8 | | | | | | | | | | | | | 1 | 2 | 3 | | | 4 | | 5 | 6 | | | 7 | | | | | | | |
| B3 | 2.2.18 Capstan brake assembly | T/B | 7 | | | | | | | | | | | | | 1 | 2 | 3 | | | 4 | | 5 | 6 | | | | | | | | | | |
| T14 | 2.2.19 Sub brake assembly(take-up side) | T/B | 15 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | 9 | 10 | 11 | | | 12 | | 13 | 14 | | | | | | | | | | |
| T15 | 2.2.20 Main brake assembly(take-up side) | T/B | 16 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | 9 | 10 | 11 | | | 12 | | 13 | 14 | | | | 15 | | | | | | |
| T19 | 2.2.20 Main brake assembly(supply side) | T/B | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | | | | | | | | | | | |
| T13 | 2.2.20 Reel disk (take-up side) | T/B | 16 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | 9 | 10 | 11 | | | 12 | | 13 | 14 | | | | 15 | | | | | | |
| T22 | 2.2.21 Tension brake assembly | T/B | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | | | | | | | | | | | |
| T20 | 2.2.21 Reel disk (supply side) | T/B | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | | | | | | | | | 9 | | |
| T24 | 2.2.21 Tension arm assembly | T/B | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | | | | | | | | | 9 | | |
| B9 | 2.2.21 Tension arm bearing | T/B | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | | | | | | | | | 9 | | |
| T18 | 2.2.22 Idler lever | T/B | 17 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | 9 | 10 | 11 | | | 12 | | 13 | 14 | | | | | | | | 15 | 16 | |
| T16 | 2.2.22 Idler arm assembly | T/B | 18 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | 9 | 10 | 11 | | | 12 | | 13 | 14 | | | | | | | | 15 | 16 | 17 |
| B19 | - Brake lever (*1) | T/B | 18 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | 9 | 10 | 11 | | | 12 | | 13 | 14 | | | | 15 | 16 | 17 | | | | |
| B16 | - Rotary encoder guide | T/B | 19 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | 9 | 10 | 11 | | | 12 | | 13 | 14 | | | | 15 | 16 | 17 | | | | 18 |

Table 2-1-5b

**Note:**

- ***The parts with marked ( ∗ ) have different types of mechanisms (standard type or high-speed FF/REW type).***
  - ***∗1 : Uses the standard type mechanism only.***
  - ***∗2 : Uses the high-speed FF/REW type mechanism only.***

## 2.2 REPLACEMENT OF MAJOR PARTS

### 2.2.1 Before Starting Disassembling (Phase matching between mechanical parts)

The mechanism of this unit is closely linked with the rotary encoder and system controller circuits.
Since the system controller detects the status of mechanical operation in response to phases of the rotary encoder (internal switch positions), the mechanism may not operate properly unless such parts as the rotary encoder, control plate, loading arm gear, control cam, cassette gear, limit gear, relay gear and drive gear are installed in their correct positions.
Especially, this model is not provided with any cassette housing assembly, so that cassette loading and unloading must be accomplished by operation of the cassette holder assembly. The latter is in turn driven by such parts as the drive gear, relay gear and limit gear. Exercise enough care, therefore, to have the phases of all this gear matching one another. (For information on phase matching of the mechanism, see the instructions on how to install individual parts.)
This unit is provided with a mechanism assembly mode. It is therefore necessary to enter this mode for assembling and disassembling procedures.
This mode is usually not in use, manually set it when it is required.

### 2.2.2 How to Set the Mechanism Assembling Mode

Remove the mechanism assembly and place it bottom side up. (See SECTION 1 DISASSEMBLY.) Turn the worm gear toward the front so that the guide hole of the control cam is brought into alignment with the hole at the mechanism assembly chassis. This position renders the mechanism assembling mode operational. Make sure that the control plate is located in alignment with the mark E. (See Fig.2-2-2a.)

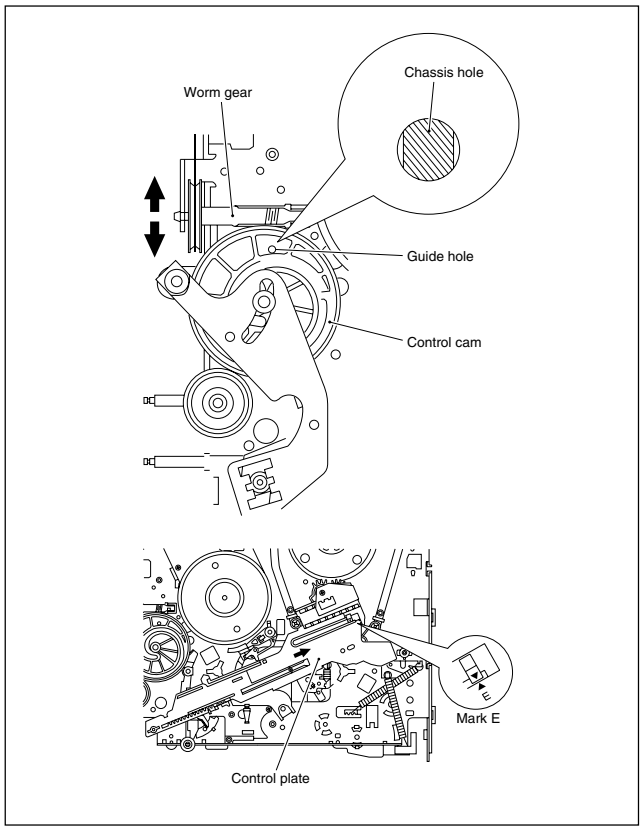



Fig. 2-2-2a

### 2.2.3 Cassette Holder Assembly

**1. How to remove**

(1) Remove the guide rail and roller cam assembly. (See Fig.2-2-3a.)
(3 lugs on the guide rail and one lug on the roller cam assembly)

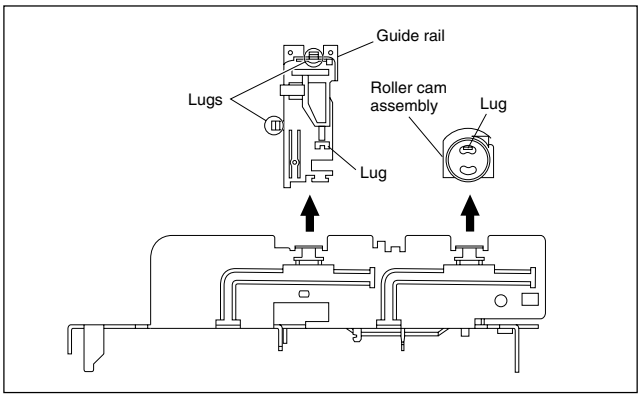



Fig. 2-2-3a

(2) Remove the two slit washers and remove the cassette housing bracket. (See Fig.2-2-3b.)
(3) Remove the opener guide, spring(A), door opener, relay gear and limit gear. (See Fig.2-2-3b.)

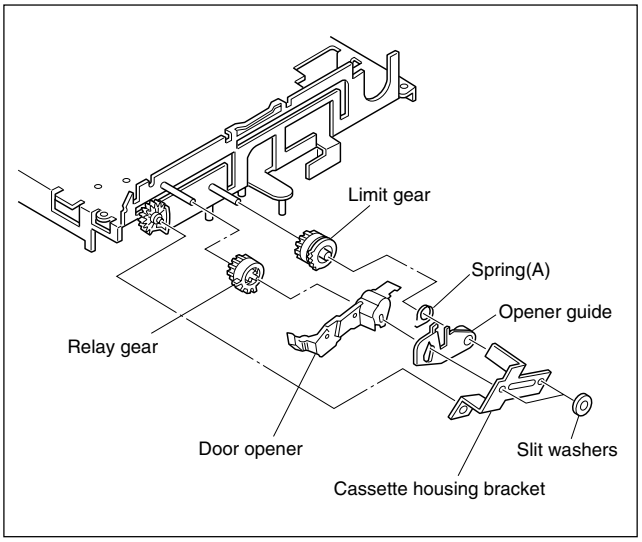



Fig. 2-2-3b

(4) While swinging the lock levers (R) and (L) of the cassette holder assembly toward the front, slide the cassette holder assembly until its legs come to where the guide rail and the roller cam assembly have been removed (so that the drive arm is upright). (See Fig.2-2-3c.)

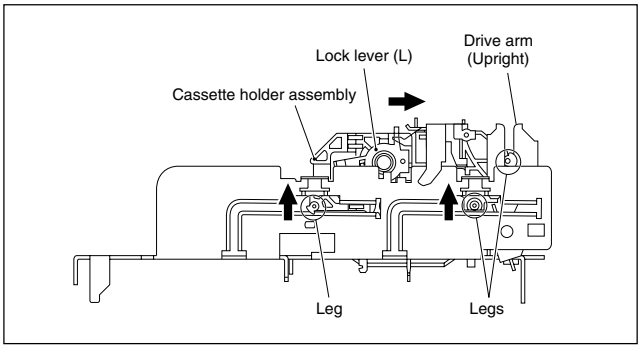



Fig. 2-2-3c

(5) While holding the left side of the cassette holder, lift the cassette holder assembly so that the three legs on the left side are all released. Then pull the legs Ⓐ and Ⓑ on the right side out of the rail and also pull up the leg Ⓒ. (See Fig.2-2-3d and Fig.2-2-3e.)
(6) Draw out the drive gear, and remove the drive arm.

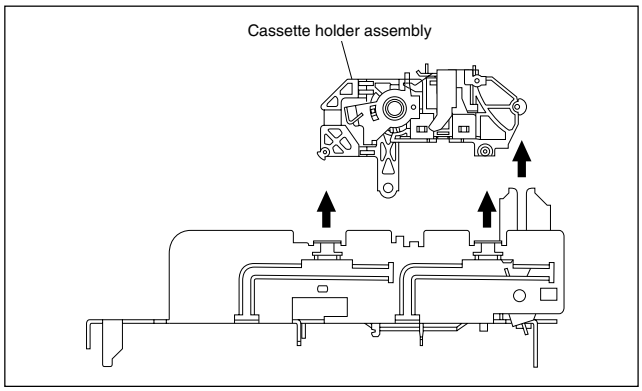



Fig. 2-2-3d

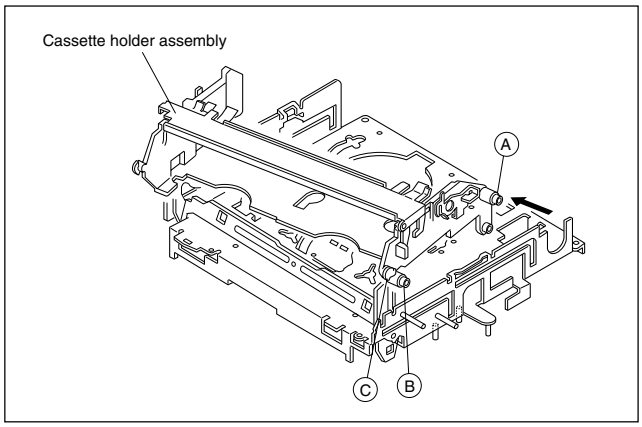



Fig. 2-2-3e

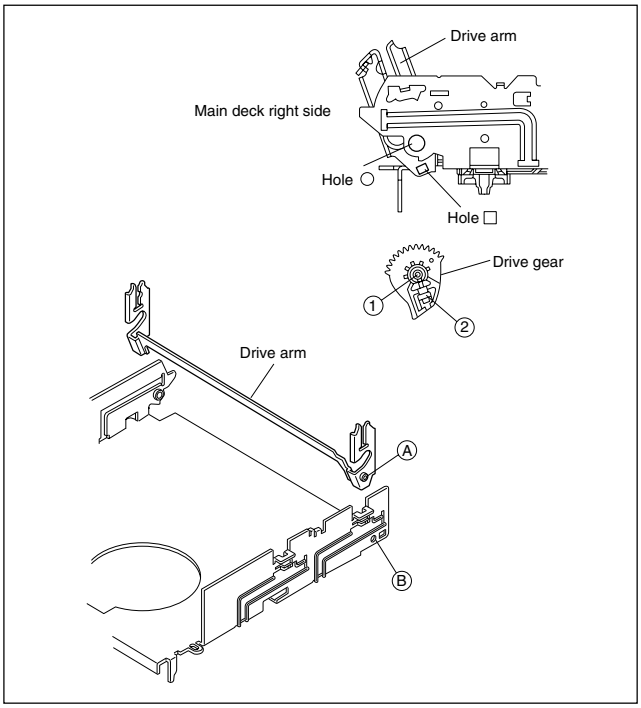



Fig. 2-2-3f

**2. How to install (Phase matching)**

(1) Insert the section Ⓐ of the drive arm into the section Ⓑ of the main deck.
(2) Insert the section ① of the drive gear into the round hole, and the section ② into the square hole on the drive arm. (See Fig.2-2-3f.)
(3) Hold the drive arm upright and fit the leg Ⓒ on the right side of the cassette holder assembly into the groove. (See Fig.2-2-3g.)
(4) While swinging the lock lever (R) of the cassette holder assembly toward the front, put the legs Ⓐ and Ⓑ into the rail. (See Fig.2-2-3g.)
(5) Drop the three legs on the left side of the cassette holder assembly into the groove at one time. (See Fig.2-2-3h.)
(6) Slide the whole cassette holder assembly toward the front to bring it to the eject end position.
(7) Install the limit gear so that the notch on the outer circumference of the limit gear is brought into alignment with the guide hole on the main deck. (See Fig.2-2-3i.)
(8) Install so that the notch on the periphery of the relay gear is aligned with the notch of the main deck and that hole A of the relay gear is aligned with the hole A of the limit gear and that hole B of the relay gear is aligned with the hole B of the drive gear. (See Fig.2-2-3i.)
(9) Install the door opener, opener guide, spring(A) and cassette housing bracket and fasten the two slit washers.

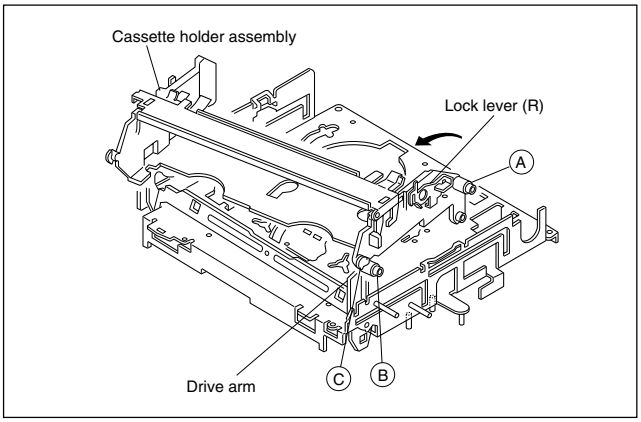



Fig. 2-2-3g

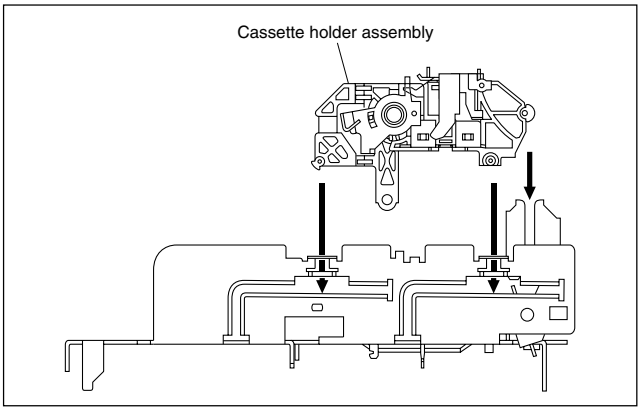



Fig. 2-2-3h

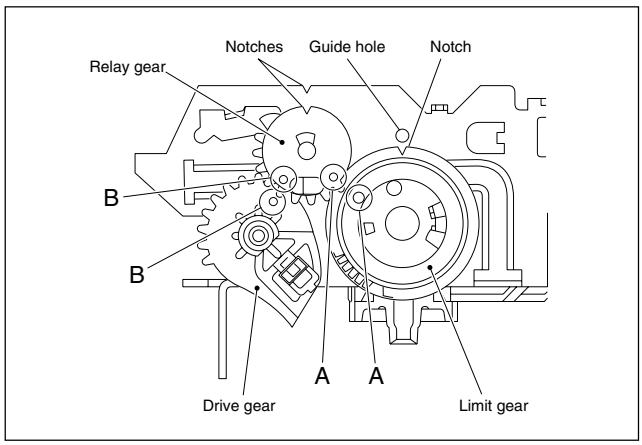



Fig. 2-2-3i

### 2.2.4 Pinch Roller Arm Assembly

**1. How to remove**

(1) Remove the spring from the hook of the press lever assembly.
(2) Remove the slit washer and remove the pinch roller seat 2. (See Fig.2-2-4a.)
(3) Remove the pinch roller arm assembly by pulling it up.

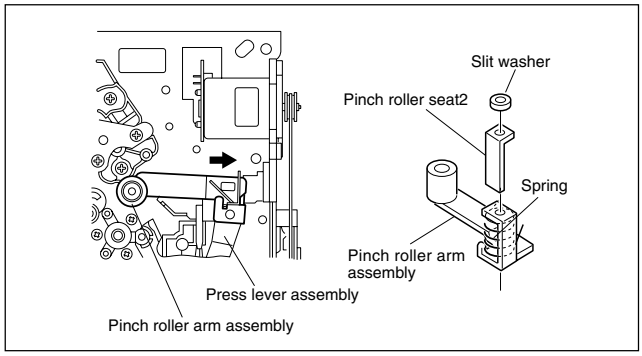



Fig. 2-2-4a

### 2.2.5 Guide Arm Assembly and Press Lever Assembly

**1. How to remove**

(1) Remove the spring and expand the lug of the lid guide in the arrow-indicated direction. Then remove the guide arm assembly by pulling it up.
(2) Remove the press lever assembly by pulling it up. (See Fig.2-2-5a.)

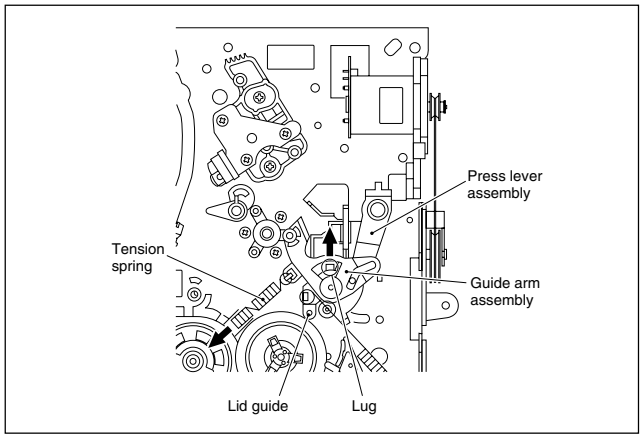



Fig. 2-2-5a

### 2.2.6 Audio Control Head

**1. How to remove**

(1) Remove the two screws (A) and remove the audio control head together with the head base.
(2) When replacing only the audio control head, remove the three screws (B) while controlling the compression spring.

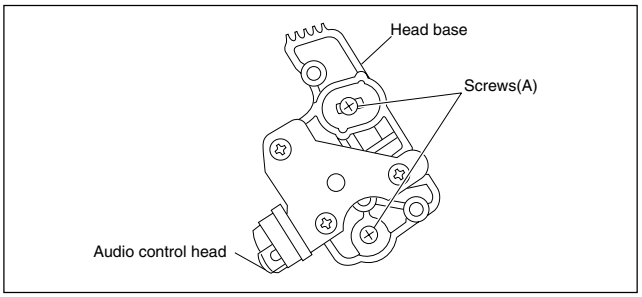



Fig. 2-2-6a

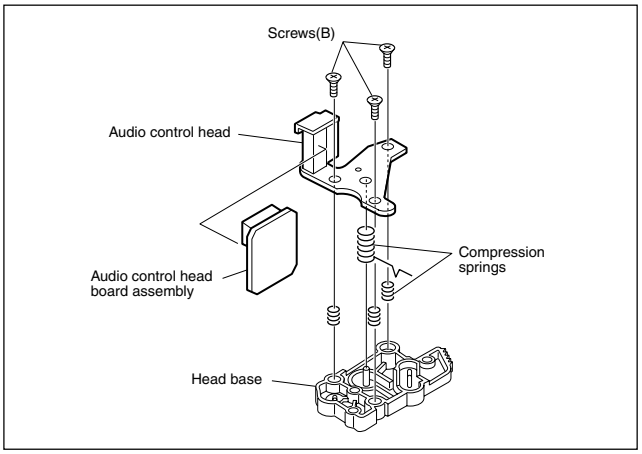



Fig. 2-2-6b

**2. How to install**

(1) To make the post-installation adjustment easier, set the temporary level as indicated in Fig.2-2-6c. Also make sure that the screw center (centre) is brought into alignment with the center (centre) position of the slot.

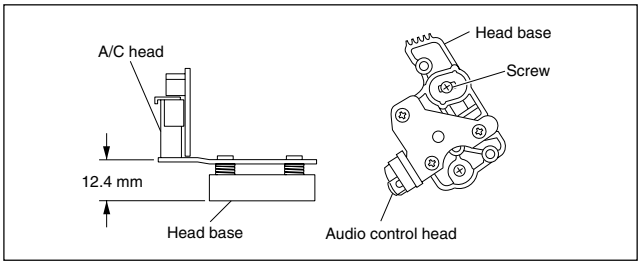



Fig. 2-2-6c

### 2.2.7 Loading Motor

**1. How to remove**

(1) Remove the belt wound around the worm gear.
(2) Open the two lugs of the motor guide and remove the loading motor, loading motor board assembly and motor guide altogether by pulling them up.
(3) When replacing the loading motor board assembly, take care with the orientation of the loading motor. (Install so that the loading motor label faces upward.)
(4) When the motor pulley has been replaced, choose the fitting dimension as indicated in Fig.2-2-7a.

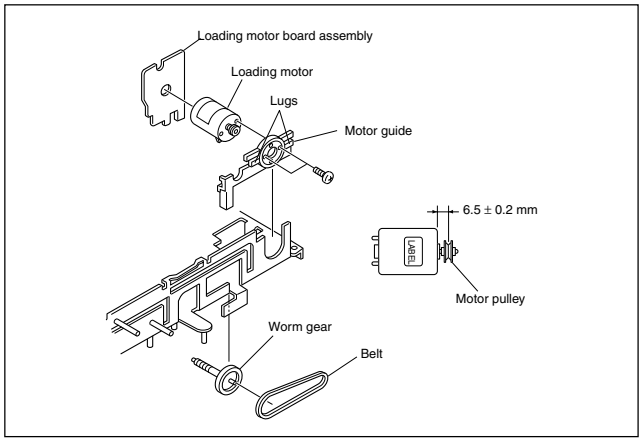



Fig. 2-2-7a

### 2.2.8 Capstan Motor

**1. How to remove**

(1) Remove the belt (capstan) on the mechanism assembly back side.
(2) Remove the three screws (A) and remove the capstan motor.

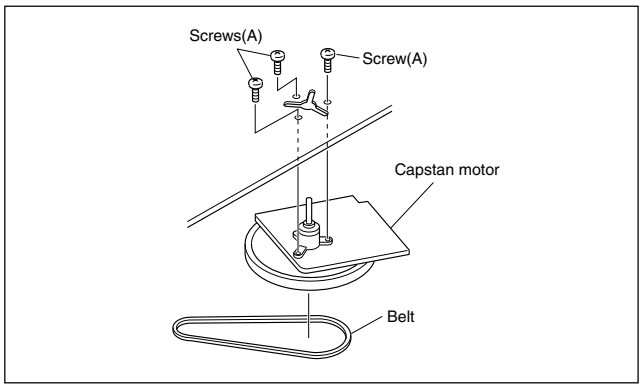



Fig. 2-2-8a

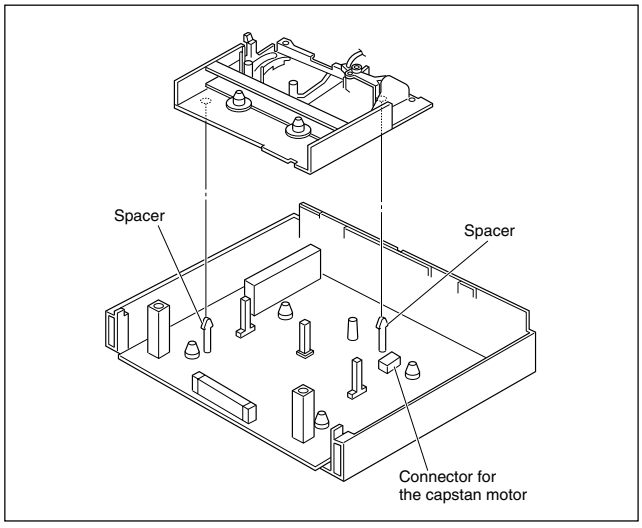



Fig. 2-2-8b

**2. How to install (Centering the mounting position)**

When the capstan motor has once been removed and then reinstalled out of the initial correct position in the rotational direction, the capstan motor current may be unstable during operation in high or low temperatures. This may result in greater Wow & Flutter and occasionally in power breakdown because of current over - load. Install the capstan motor while following the procedure given below.
(The capstan motor is centrally located when the unit is shipped from the factory.)

(1) Provisionally tighten the three screws (A) securing the capstan motor.
(2) Install the mechanism assembly to which the capstan motor is provisionally fastened on the bottom chassis which incorporates the Main board assembly. (No need to tighten the screws for mounting the mechanism.)
Make sure that all the connectors for the mechanism assembly and the Main board assembly are correctly installed as indicated in Fig. 2-2-8b.
(3) Making sure that the connector for the capstan motor is correctly mounted, and securely tighten the three screws (A).

**Note:**

- ***When the capstan motor has been replaced with a new one, perform recording in the EP(or LP) mode for at least 2 minutes at normal temperatures immediately before starting the FF/REW or SEARCH operations (Aging).***

### 2.2.9 Pole Base Assembly (supply or take-up side)

**1. How to remove**

(1) Remove the UV catcher 2 on the removal side by loosening the screw (A).
(2) Remove the pole base assembly on the supply side from the mechanism assembly by loosening the screw (B) on the mechanism assembly back side and sliding the pole base assembly toward the UV catcher 2.
(3) As for the pole base assembly on the take-up side, turn the pulley of the loading motor to lower the cassette holder because the screw (B) is hidden under the control plate. (See the “Procedures for Lowering the Cassette holder assembly” of 1.3 DISASSEMBLY/ASSEMBLY METHOD.) Further turn the motor pulley to move the cassette holder until the screw (B) is no longer under the control plate (in the half-loading position). Then remove it as done for the supply side by removing the screw (B).

**Note:**

- ***After reinstalling the Pole base assembly and the UV catcher2, be sure to perform compatibility adjustment.***

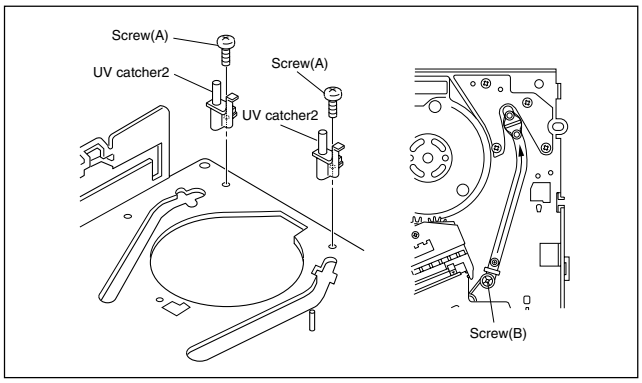



Fig. 2-2-9a

### 2.2.10 Rotary Encoder

**1. How to remove**

(1) Remove the screw (A) and remove the rotary encoder by pulling it up. (See Fig. 2-2-10a.)

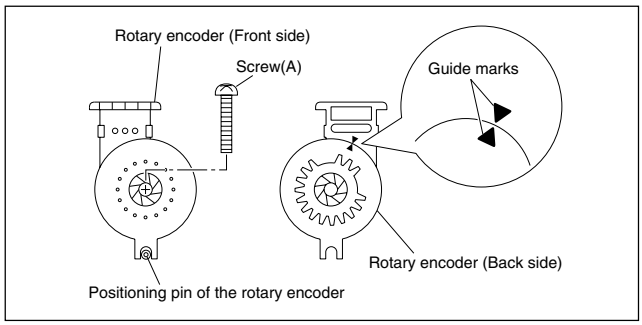



Fig. 2-2-10a

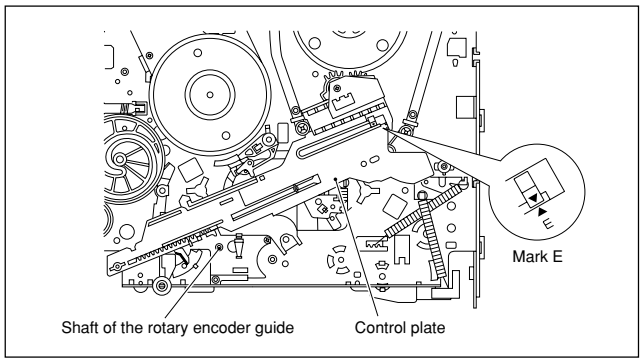



Fig. 2-2-10b

**2. How to install (Phase matching)**

(1) Make sure that the mark E of the control plate is in alignment with the mark ▼ of the loading arm gear shaft and bring the guide marks on the rotary encoder into alignment as indicated in Fig.2-2-10a. (See Fig. 2-2-10a and Fig. 2-2-10b.)

(2) Turn over the rotary encoder with its guide marks kept in alignment and install it by fitting on the shaft of the rotary encoder guide and the positioning pin.

(3) Tighten the screw (A) to complete the installation.

### 2.2.11 Clutch Unit

(1) Remove the belt wound around the capstan motor and the clutch unit.

(2) Remove the slit washer and remove the clutch unit.

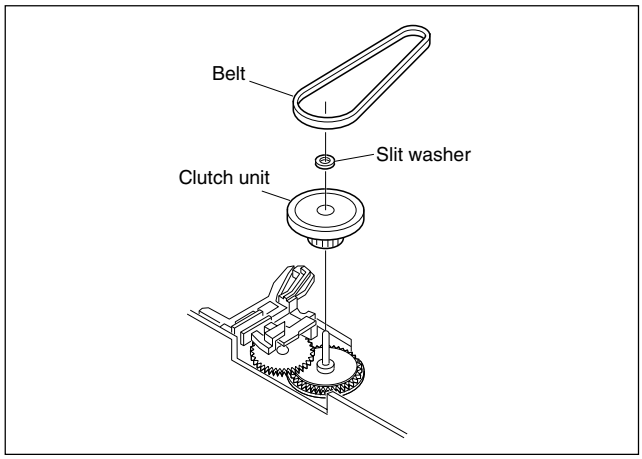


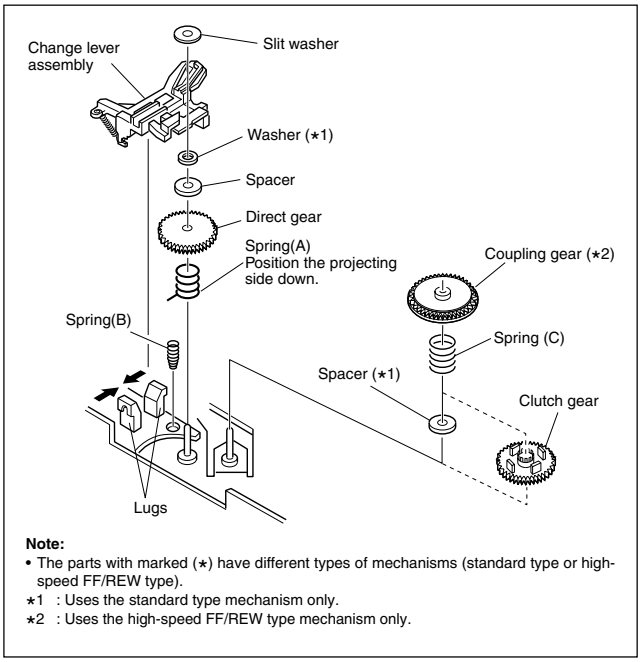

Fig. 2-2-11a

### 2.2.12 Change Lever Assembly, Direct Gear, Clutch Gear and Coupling Gear

**1. How to remove**

(1) Release the two lugs of the rotary encoder guide in the arrow-indicated direction and remove the change lever assembly.

(2) Remove the slit washer retaining the direct gear and remove the latter.
Take care so as not to lose the washer and spring. (See Fig.2-2-12a.)




**Note:**
- The parts with marked (⋆) have different types of mechanisms (standard type or high-speed FF/REW type).

⋆1 : Uses the standard type mechanism only.
⋆2 : Uses the high-speed FF/REW type mechanism only.

Fig. 2-2-12a

**2. How to install**

(1) Install the clutch gear, spring (A), spring (C), direct gear, spacer and others to the individual shafts of the main deck, and finally the slit washer. (See Fig.2-2-12a.)

(2) Let the spring (B) drops into the rotary encoder guide hole and install the change lever assembly.(Take care not to mistake a direction of the spring.) The point is to slightly lift the coupling gear and catch it from the both sides with the assembly. (See Fig.2-2-12b.)

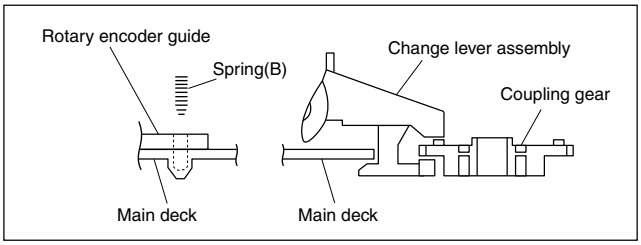



Fig. 2-2-12b

### 2.2.13 Link Lever

**1. How to remove**

(1) Remove the two slit washers.
(2) Remove the link lever by lifting it from the shaft retained by the slit washers. Then swing the link lever counterclockwise and remove it from the locking section of the control plate.

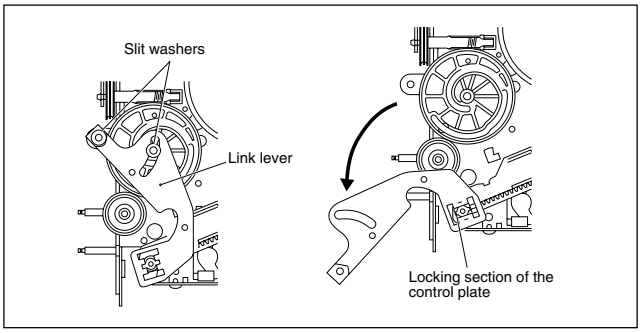



Fig. 2-2-13a

**2. How to install (Phase matching)**

(1) Slide the control plate so that its mark E is aligned with the mark ▼ on the loading arm gear shaft. (See Fig.2-2-13b.)
(2) Rotate the worm gear until the guide hole of the control cam is aligned exactly with the guide hole of the main deck. (See Fig.2-2-13c.)
(3) Insert the link lever into the locking section of the control plate. (See Fig.2-2-13a.)
(4) Rotate the link lever clockwise so that it is installed on the shafts in the center (centre) and on the left of the control cam.
(5) Fasten the slit washers at these two points.

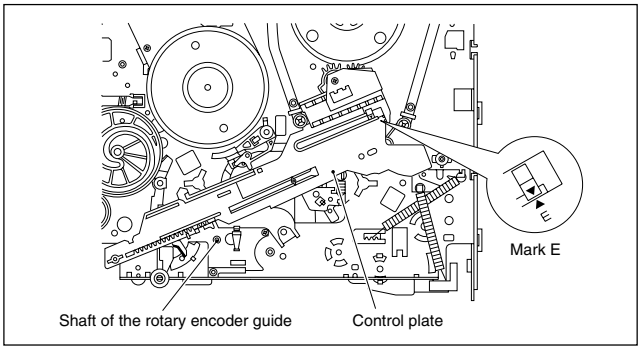



Fig. 2-2-13b

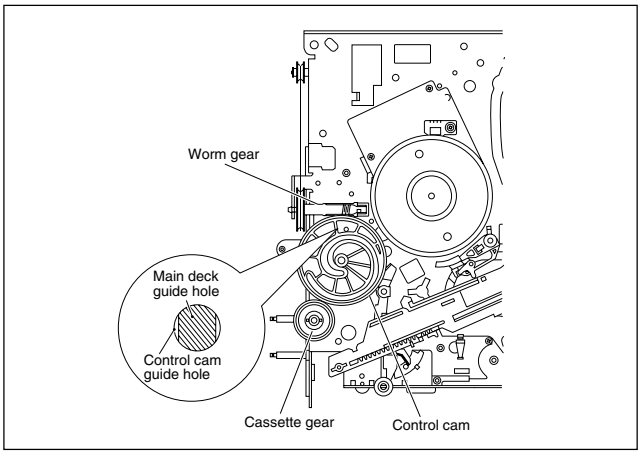



Fig. 2-2-13c

### 2.2.14 Cassette Gear, Control Cam and Worm Gear

**1. How to remove**

(1) Remove the control cam by lifting it.
(2) Open the two lugs of the cassette gear outward and pull the latter off.
(3) Remove the belt wound around the worm gear and the loading motor.
(4) Open the lug of the lid guide outward and remove the worm gear.

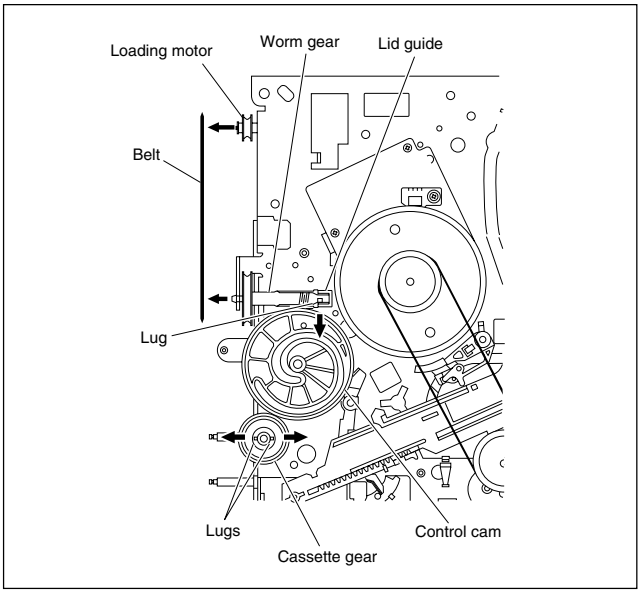



Fig. 2-2-14a

### 2.2.15 Control Plate

**1. How to remove**

(1) Remove the screw (A) retaining the control bracket 1 and remove the latter.
(2) Slide the control plate as indicated by the arrow and remove the control plate. (See Fig.2-2-15a.)

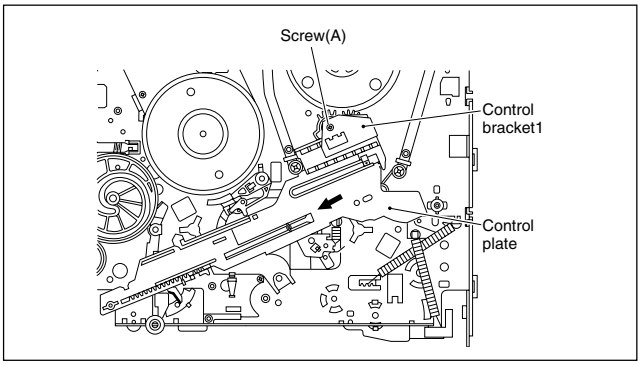



Fig. 2-2-15a

**2. How to install (Phase matching)**

(1) Adjust the position of the idler arm assembly pin as indicated in Fig.2-2-15b (to the left of center (centre) of the R section).
(2) Bring the guide hole of the take-up lever into alignment with the hole at the control plate guide and fix the position by inserting a 1.5 mm hexagonal wrench.

(3) Install the control plate so that the section A of the loading arm gear shaft fits into the hole (A) of the control plate, the section B of the control plate guide into the hole (B), and the control plate comes under the section C of the rotary encoder guide and the section D of the loading arm gear shaft while press-fit the pole base assmebly (supply side) as indicated by the arrow. It is important that the tension arm assembly shaft is positioned closer toward you than the control plate. (See Fig.2-2-15c.)
(4) Make sure that the mark E of the control plate is in alignment with the mark ▼ of the loading arm gear shaft. (See Fig.2-2-15c.)
(5) Pull off the hexagonal wrench for positioning.

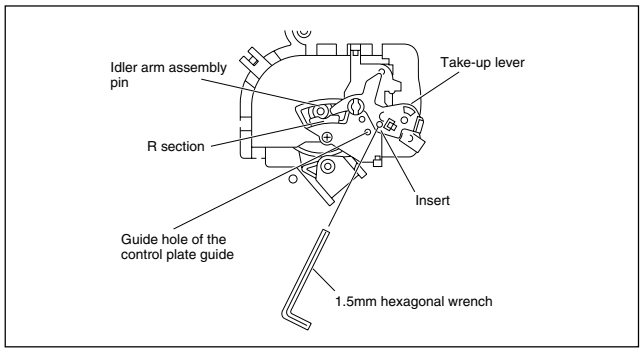



Fig. 2-2-15b

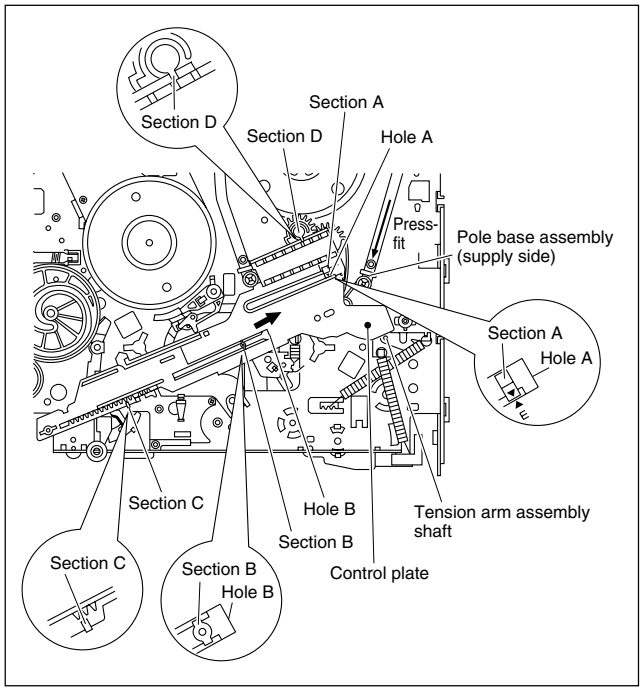



Fig. 2-2-15c

### 2.2.16 Loading Arm Gear (supply or take-up side) and Loading Arm Gear Shaft

**1. How to remove**

(1) Remove the loading arm gear (supply side) by loosening the screw (A). (See Fig. 2-2-16a.)
(2) Remove the screw (B) and remove the torsion arm from the pole base assembly (take-up side). (See Fig.2-2-16a.)
(3) Turn the loading arm gear (take-up side) clockwise so that the notch of the loading arm gear (take-up side) is in alignment with the projection of the loading arm gear shaft and lift it.
Likewise, turn the loading arm counterclockwise so that the notch is in alignment with the projection and remove the loading arm gear (take-up side). (See Fig.2-2-16a and Fig. 2-2-16b.)
(4) When removing the loading arm gear shaft, be sure of first removing the screw retaining the drum assembly (on the back side of the loading arm gear shaft). Then remove the screw (C) and remove the loading arm gear shaft by sliding it.

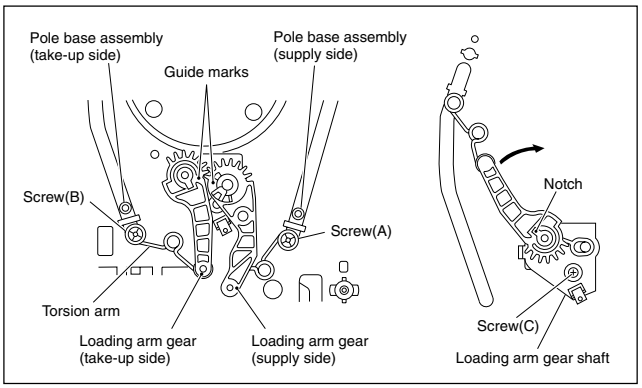



Fig. 2-2-16a

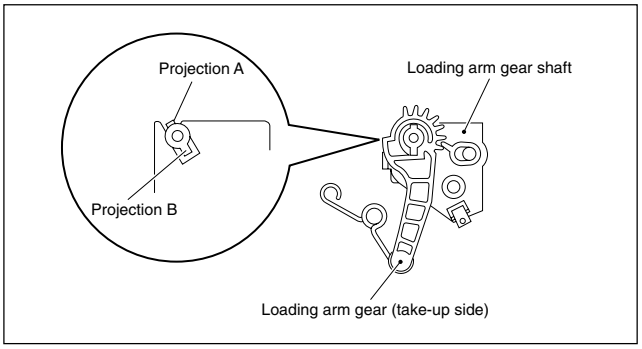



Fig. 2-2-16b

**2. How to install**

(1) Align the notch of the loading arm gear (take-up side) to the projection B of the loading arm gear shaft and slip it over. Then rotate it clockwise for alignment with the projection A and slip it down to the bottom. (See Fig.2-2-16b.)
(2) Then turn the loading arm gear (take-up side) counterclockwise. Hang the torsion arm on the pole base assembly (take-up side) and tighten the screw (B).
(3) Install the loading arm gear (supply side) so that the guide mark of the loading arm gear (take-up side) is in alignment with the guide mark of the loading arm gear (supply side). Then hang the torsion arm on the pole base assembly (supply side) and tighten the screw (A). (See Fig.2-2-16a.)

### 2.2.17 Take-up Lever, Take-up Head and Control Plate Guide

(1) Remove the spring of the take-up lever from the main deck.
(2) Remove the lug (A) of the take-up lever from the main deck and pull out the take-up lever and the take-up head together.
(3) Remove the screw (A).
(4) Align the idler arm assembly pin in the center (centre) of the R section of the control plate guide, remove the control plate guide lugs (B) and (C) from the main deck, and remove the control plate guide.

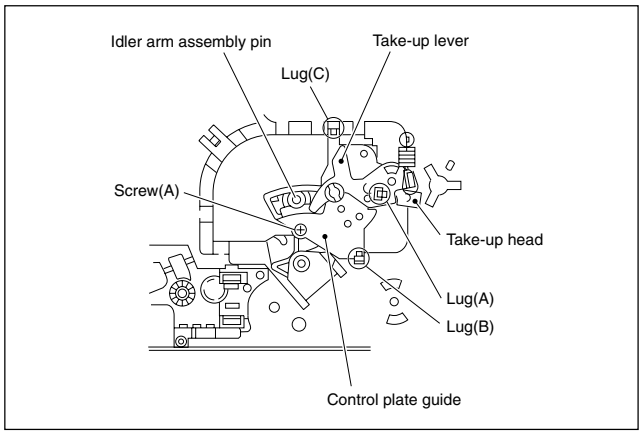



Fig. 2-2-17a

### 2.2.18 Capstan Brake Assembly

**1. How to remove**

(1) Move the lug (A) of the capstan brake assembly in the arrow-indicated direction so that it comes into alignment with the notch of the main deck. (See Fig. 2-2-18a.)
(2) Remove the lug (B) of the capstan brake assembly from the main deck and remove the capstan brake assembly.

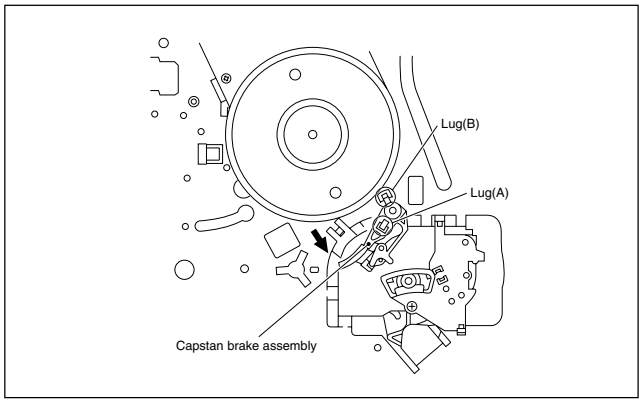



Fig. 2-2-18a

### 2.2.19 Sub Brake Assembly (take-up side)

**1. How to remove**

(1) Remove the spring attached to the lid guide and sub brake assembly (take-up side).
(2) Bring the lug (A) of the sub brake assembly (take-up side) into alignment with the notch of the main deck.
(3) Remove the lugs (B) and (C) of the sub brake assembly (take-up side) from the main deck and remove the sub brake assembly (take-up side).

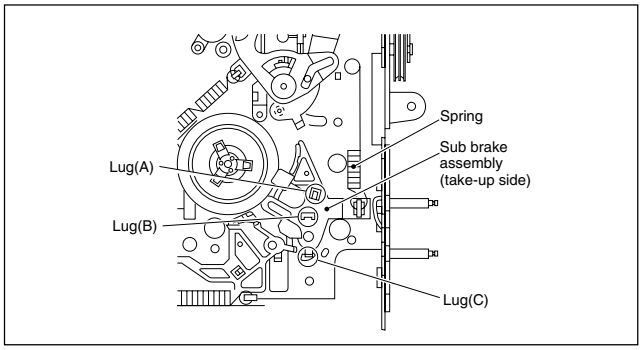



Fig. 2-2-19a

### 2.2.20 Main Brake Assembly (take-up side), Reel Disk (take-up side) and Main Brake Assembly (supply side)

**1. How to remove**

(1) Move the main brake assembly (take-up side) in the arrow-indicated direction and remove the reel disk (take-up side).
(2) Remove the spring attached to the main brake assembly.
(3) Remove the lug (A) of the main brake assembly (take-up side) and pull out the lug (B) after bringing it into alignment with the main deck notch.
(4) Remove the lugs (C), (D) and (E) of the main brake assembly (supply side) from the main deck and pull them off. (See Fig.2-2-20a.)
(5) When installing the main brake assembly (take-up side), slide the brake lever in the direction as indicated by the arrow to prevent it from hitting the projection of the main brake assembly (take-up side). (See Fig.2-2-20b.)

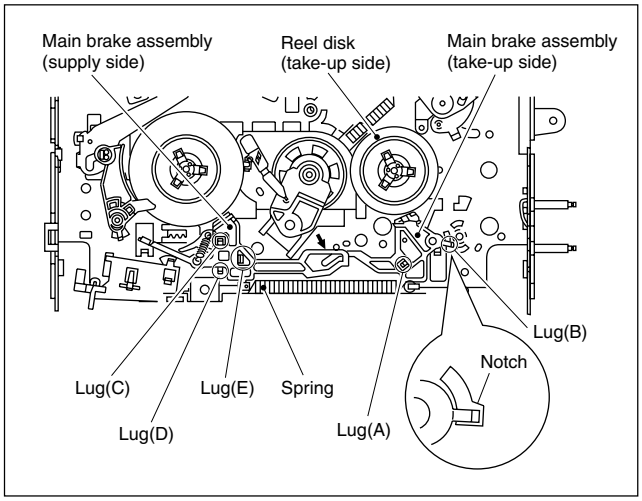
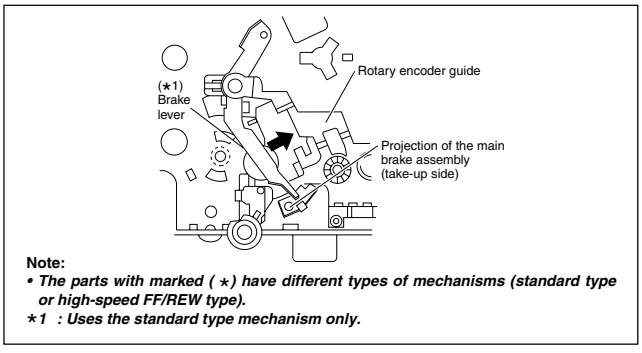



Fig. 2-2-20a




**Note:**
***• The parts with marked ( ∗) have different types of mechanisms (standard type or high-speed FF/REW type).***
***∗1 : Uses the standard type mechanism only.***

Fig. 2-2-20b

### 2.2.21 Tension Brake Assembly, Reel Disk (supply side) and Tension Arm Assembly

**1. How to remove**

(1) Remove the three lugs of the tension brake assembly from the main deck and pull them off.
(2) Remove the reel disk (supply side) by loosening in the arrow-indicated direction the main brake assembly (supply side).
(3) Remove the tension spring on the back of the main deck. Then release the lug of the tension arm bearing in the arrow-indicated direction and draw out the tension arm assembly. (See Fig. 2-2-21a.)

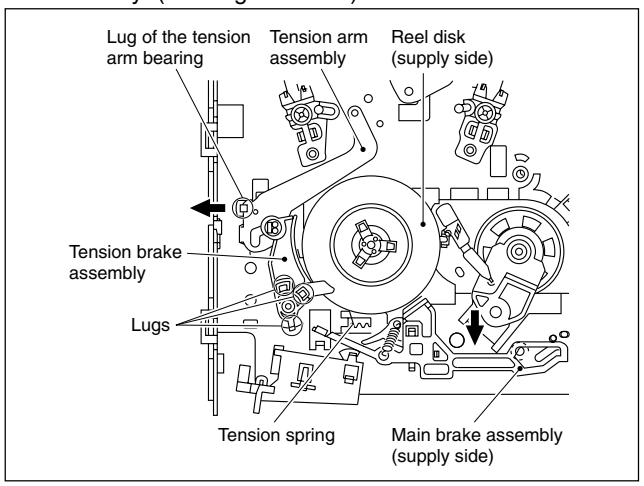



Fig. 2-2-21a

### 2.2.22 Idler Lever, Idler Arm Assembly

**1. How to remove**

(1) Remove the lug of the idler lever from the main deck and remove the hook fitted in the idler arm assembly hole by lifting it.
(2) Remove the slit washer and pull out the idler arm assembly.

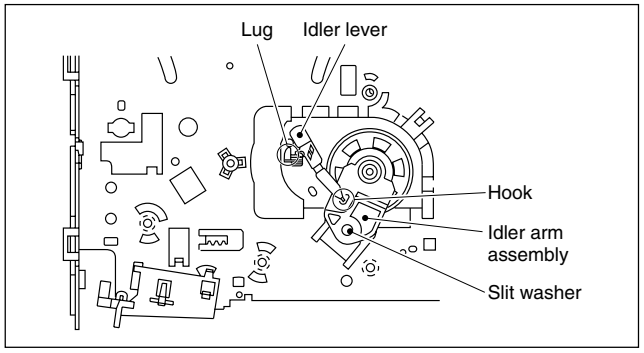



Fig. 2-2-22a

### 2.2.23 Stator Assembly

(1) Remove the flat cable.
(2) Remove the two screws (A).
(3) Remove the stator assembly by lifting in the arrow-indicated direction. (Take care that the brush spring does not jump out.)
(4) After installation, be sure to perform the PB switching point adjustment according to the electrical adjustment procedure.

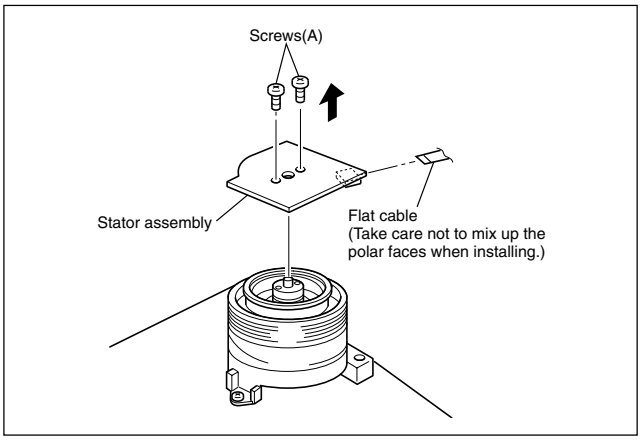



Fig. 2-2-23a

### 2.2.24 Rotor Assembly

(1) Remove the stator assembly.
(2) Remove the two screws (B) and remove the rotor assembly.

**Note:**

- ***When installing the rotor assembly, note that a normal picture cannot be obtained without ensuring the phase matching as mentioned below.***

(3) Match the phases of the upper drum assembly and the rotor assembly as indicated in Fig.2-2-24a.
(4) Place the upper drum assembly hole (a) over the rotor assembly holes (b) (with three holes to be aligned) and tighten the two screws (B). (See Fig.2-2-24a.)

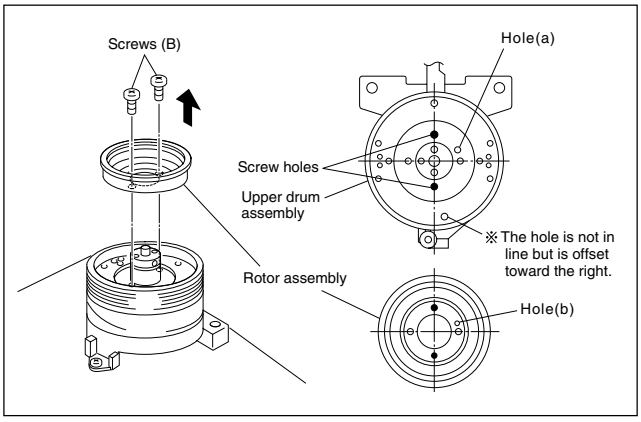



Fig. 2-2-24a

### 2.2.25 Upper Drum Assembly

**1. How to remove**

(1) Remove the stator assembly and rotor assembly.
(2) Loosen the screw of the collar assembly using a 1.5 mm hexagonal wrench and remove the collar assembly. Also remove the brush, spring and cap at one time.
(3) Remove the upper drum assembly and remove the washer using tweezers.

**Note:**

***• When replacement is required, control the up- down movement of the brush. Never apply grease.***

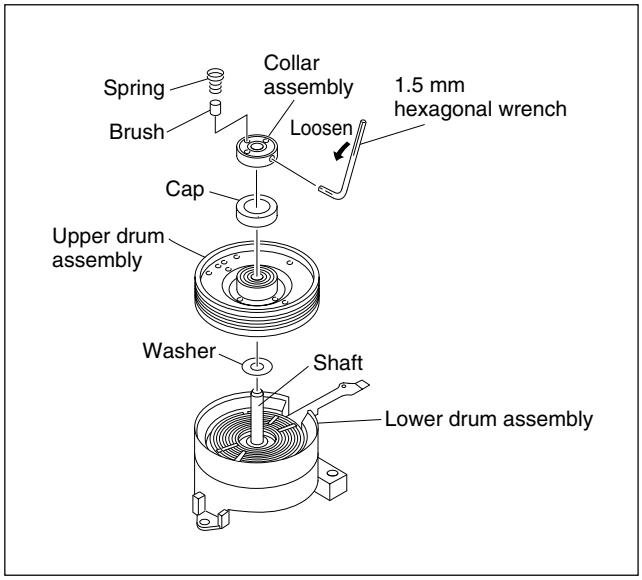



Fig. 2-2-25a

**2. How to install**

(1) Clean the coil parts of the lower drum assembly and the newly installed upper drum assembly with an air brush in advance. (See Fig.2-2-25b.)
(2) Install a new washer and upper drum assembly on the drum shaft. (See Fig.2-2-25a.)

**Note:**

***• When replacing the upper drum assembly, replace it the together with the washer.***

(3) Install the cap to the upper drum assembly.
(4) Position the collar assembly as indicated in Fig.2-2-25c while controlling its up- down movement.
(5) Secure the collar assembly in position with a hexagonal wrench while pressing its top with the fingers.
(6) After installation, gently turn the upper drum assembly with your hand to make sure that it turns normally. Then install the brush and the spring.
(7) Install the rotor assembly and stator assembly according to Fig 2-2-23a and 2-2-24a.
(8) When installation is complete, clean the upper drum assembly and lower drum assembly and carry out the following adjustments.
  • PB switching point adjustment
  • Slow tracking adjustment
  • Compatibility adjustment (Be sure to check for compatibility for the EP (or LP) mode.)

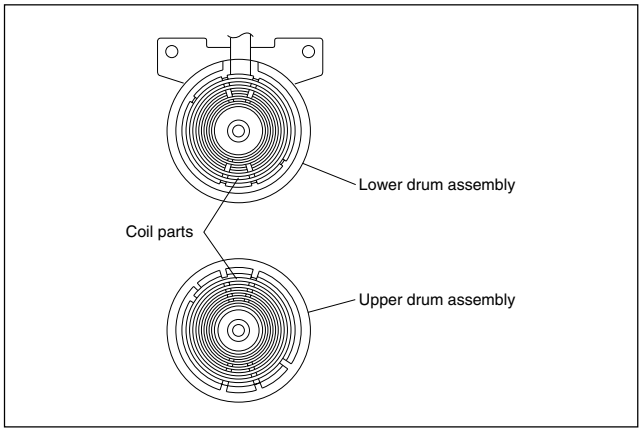



Fig. 2-2-25b

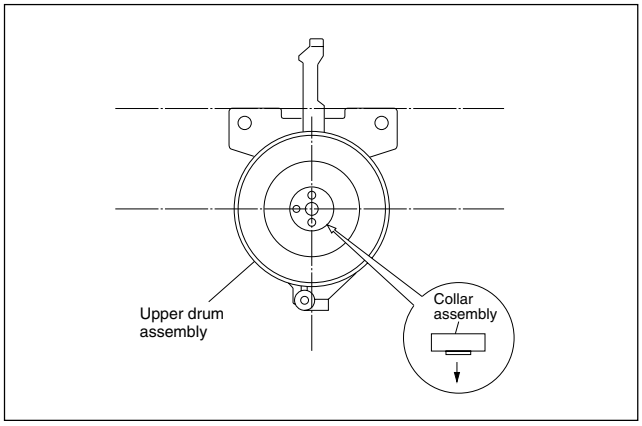



Fig. 2-2-25c

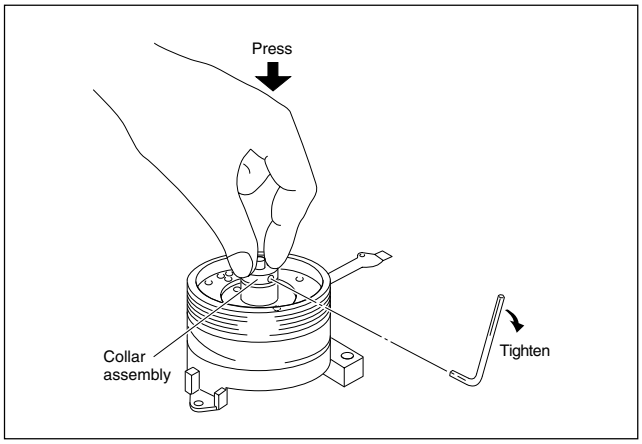



Fig. 2-2-25d

## 2.3 COMPATIBILITY ADJUSTMENT

**Notes:**

- ***Although compatibility adjustment is very important, it is not necessary to perform this as part of the normal servicing work. It will be required when you have replaced the audio control head, drum assembly or any part of the tape transport system.***
- ***To avoid any damage to the alignment tape while performing the compatibility adjustment, get a separate cassette tape (for recording and play back) ready to be used for checking the initial tape running behavior.***
- ***Unless otherwise specified, all measuring points and adjustment parts are located on the Main board.***
- ***When using the Jig RCU, set its custom code to match the custom code of the VCR.***

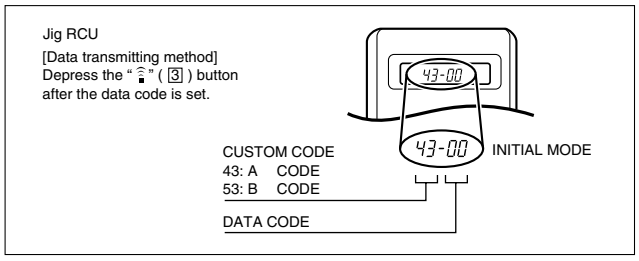



Fig. 2-3a Jig RCU [PTU94023B]

### 2.3.1 Checking/Adjustment of FM Waveform Linearity

| | | |
|---|---|---|
| Signal | (A1)<br>(A2) | • Alignment tape(SP, stairstep, NTSC) [MHP]<br>• Alignment tape(EP, stairstep, NTSC) [MHP-L] |
| Mode | (B) | • PB |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • TP106 (PB. FM) |
| External trigger | (E) | • TP111 (D.FF) |
| Adjustment part | (F) | • Guide roller [Mechanism assembly] |
| Specified value | (G) | • Flat V.PB FM waveform |
| Adjustment tool | (H) | • Roller driver [PTU94002] |

(1) Play back the alignment tape (A1).
(2) Apply the external trigger signal to D.FF (E), to observe the V.PB FM waveform at the measuring point (D).
(3) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(4) Make sure that there is no significant level drop of the V.PB FM waveform caused by the tracking operation, with its generally parallel and linear variation ensured. Perform the following adjustments when required. (See Fig. 2-3-1a.)
(5) Reduce the V.PB FM waveform while pressing the channel buttons (+, –) during playback. If a drop in level is found on the left side, turn the guide roller of the pole base assembly (supply side) with the roller driver to make the V.PB FM waveform linear.
If a drop in level is on the right side, likewise turn the guide roller of the pole base assembly (take-up side) with the roller driver to make it linear. (See Fig. 2-3-1c.)
(6) Make sure that the V.PB FM waveform varies in parallel and linearly with the tracking operation again. When required, perform fine-adjustment of the guide roller of the pole base assembly (supply or take-up side).
(7) Unload the cassette tape once, play back the alignment tape (A1) again and confirm the V.PB FM waveform.
(8) After adjustment, confirm that the tape wrinkling does not occur at the roller upper or lower limits. (See Fig. 2-3-1d.)

**[Perform adjustment step (9) only for the models equipped with SP mode and EP (or LP) mode.]**

(9) Repeat steps (1) to (8) by using the alignment tape (A2).

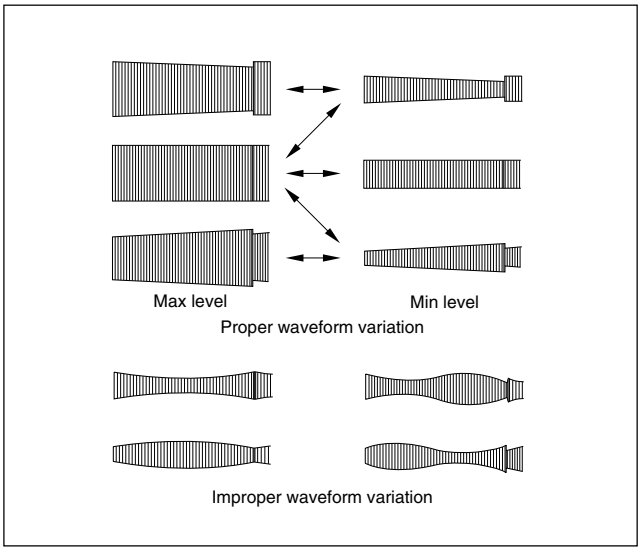



Fig. 2-3-1a

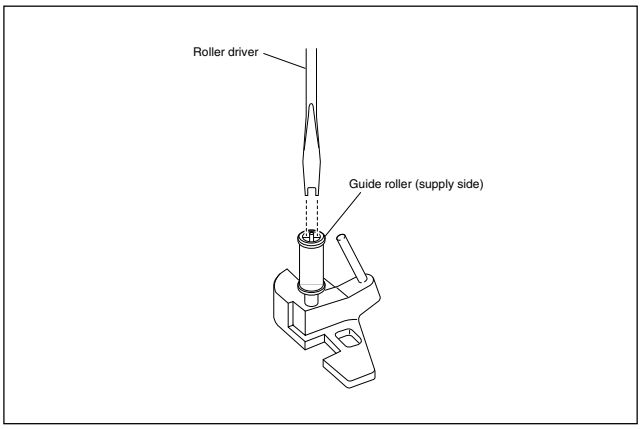



Fig. 2-3-1b

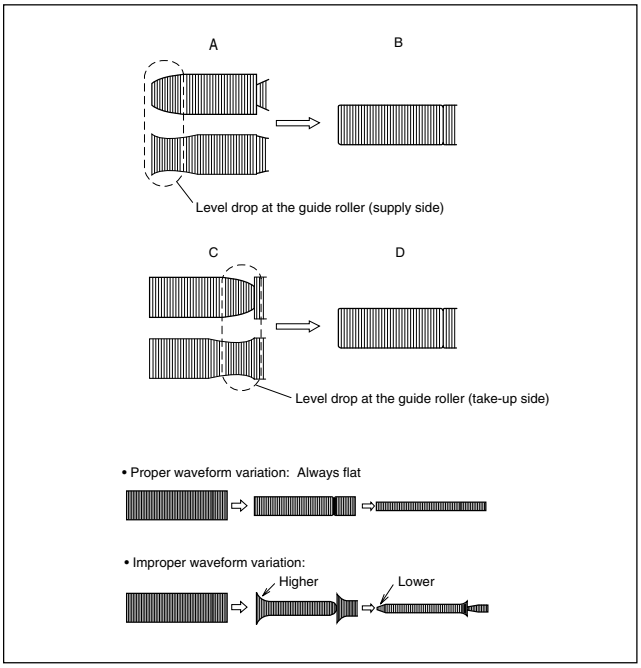



Fig. 2-3-1c

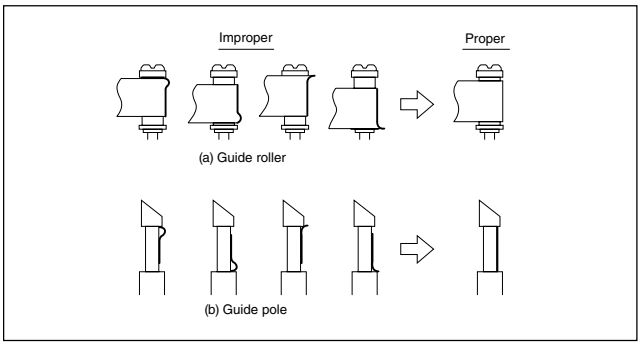



Fig. 2-3-1d

### 2.3.2 Checking/Adjustment of the Height and Tilt of the Audio Control Head

**Note:**

- ***Set a temporary level of the height of the A/C head in advance to make the adjustment easier after the A/C head has been replaced. (See Fig.2-2-6c.)***

| | | |
|---|---|---|
| Signal | (A) | • Alignment tape(SP, stairstep, NTSC) [MHP] |
| Mode | (B) | • PB |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D1)<br>(D2) | • AUDIO OUT terminal<br>• TP4001 (CTL. P) |
| External trigger | (E) | • TP111 (D.FF) |
| Adjustment part | (F) | • A/C head [Mechanism assembly] |
| Specified value | (G) | • Maximum waveform |

(1) Play back the alignment tape (A).
(2) Apply the external trigger signal to D.FF (E), to observe the AUDIO OUT waveform and Control pulse waveform at the measuring points (D1) and (D2) in the ALT mode.
(3) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(4) Adjust the AUDIO OUT waveform and Control pulse waveform by turning the screws (1), (2) and (3) little by little until both waveforms reach maximum. The screw (1) and (3) are for adjustment of tilt and the screw (2) for azimuth.

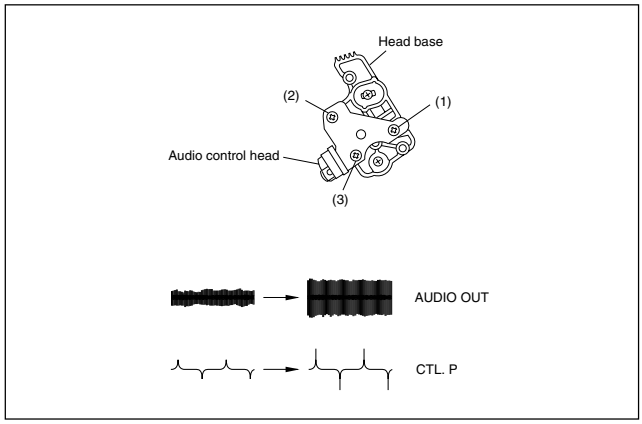



Fig. 2-3-2a

### 2.3.3 Checking/Adjustment of the Audio Control Head Phase (X-Value)

| | | |
|---|---|---|
| Signal | (A1) | • Alignment tape(SP, stairstep, NTSC) [MHP] |
| Mode | (B) | • PB |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • TP106 (PB. FM) |
| External trigger | (E) | • TP111 (D.FF) |
| Adjustment part | (F) | • A/C head base [Mechanism assembly] |
| Specified value | (G) | • Maximum V.PB FM waveform |
| Adjustment tool | (H) | • A/C head positioning tool [PTU94010] |

(1) Play back the alignment tape (A1).
(2) Apply the external trigger signal to D.FF (E), to observe the V.PB FM waveform at the measuring point (D).
(3) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(4) Loosen the screws (4) and (5), then set the A/C head positioning tool to the innermost projected part of the A/C head. (See Fig. 2-3-3a.)
(5) Turn the A/C head positioning tool fully toward the capstan. Then turn it back gradually toward the drum and stop on the second peak point position of the V.PB FM waveform output level. Then tighten the screws (4) and (5).
(6) Perform the tracking operation and make sure that the V.PB FM waveform is at its maximum.
If it is not at maximum, loosen the screws (4) and (5), and turn the A/C head positioning tool to bring the A/C head to a position, around where the waveform reaches its maximum for the first time. Then tighten the screws (4) and (5).

**[Perform adjustment steps (7) to (10) only for 2 Head models equipped with LP mode.]**

(7) Then play back the alignment tape (A2).
(8) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(9) Perform the tracking operation and make sure that the V.PB FM waveform is at its maximum.
(10) If it is not at maximum, loosen the screws (4) and (5), and turn the A/C head positioning tool to bring the A/C head to a position, around where the waveform reaches its maximum for the first time. Then tighten the screws (4) and (5).

**Note:**

- ***After adjusting, always perform the confirmation and re-adjustment of the item 2.3.4.***

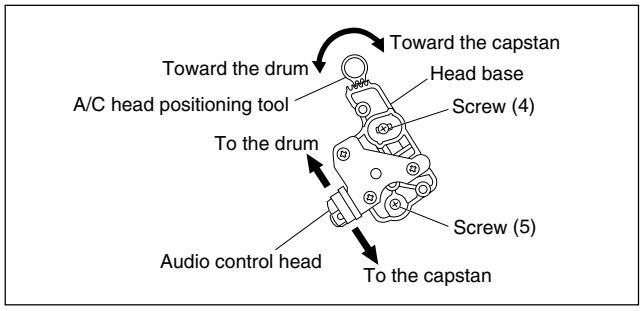



Fig. 2-3-3a

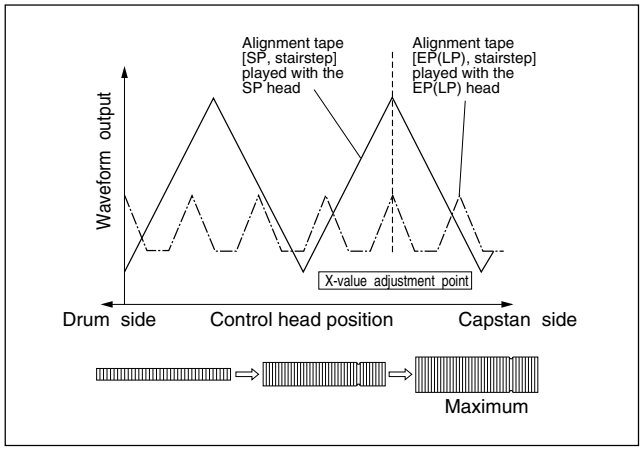



Fig. 2-3-3b

### 2.3.4 Checking/Adjustment of the Standard Tracking Preset

| | | |
|---|---|---|
| Signal | (A) | • Alignment tape(EP, stairstep, NTSC) [MHP-L] |
| Mode | (B) | • PB → Auto adjust |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • TP106 (PB. FM) |
| External trigger | (E) | • TP111 (D.FF) |
| Adjustment part | (F) | • Jig RCU: Code “50” |
| Specified value | (G) | • STOP mode (Maximum V.PB FM waveform) |
| Adjustment tool | (H) | • Jig RCU [PTU94023B] |

(1) Play back the alignment tape (A).
(2) Apply the external trigger signal to D.FF (E), to observe the V.PB FM waveform at the measuring point (D).
(3) Confirm that the automatic tracking operation is completed.
(4) Set the VCR to the Auto adjust mode by transmitting the code (F) twice from the Jig RCU. When the VCR enters the stop mode, the adjustment is completed.
(5) If the VCR enters the eject mode, perform adjustment for the audio control head phase (X-value) again.

### 2.3.5 Checking/Adjustment of the Tension Pole Position

| | | |
|---|---|---|
| Signal | (A) | • Back tension cassette gauge [PUJ48076-2] |
| Mode | (B) | • PB |
| Adjustment part | (F) | • Adjust pin [Mechansim assembly] |
| Specified value | (G) | • 25 - 51 gf•cm (2.45 – 5 × $10^{-3}$ Nm] |

(1) Play back the back tension cassette gauge (A).
(2) Check that the indicated value on the left side gauge is within the specified value (G).
(3) If the indicated value is not within the specified value (G), perform the adjustment in a following procedure.
  1) Set the VCR to the mechanism service mode. (See 1.5 MECHANISM SERVICE MODE.)
  2) Set the VCR to the play back mode and adjust by turning adjustment pin to align the tension arm assembly edge with the main deck hole (A) on the right edge marker. (See Fig. 2-3-5a)

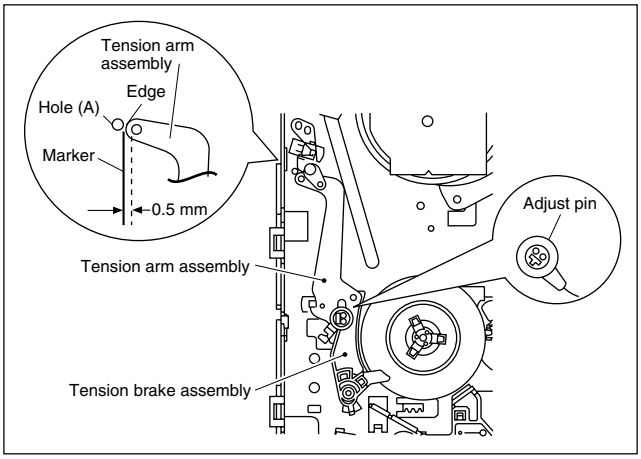
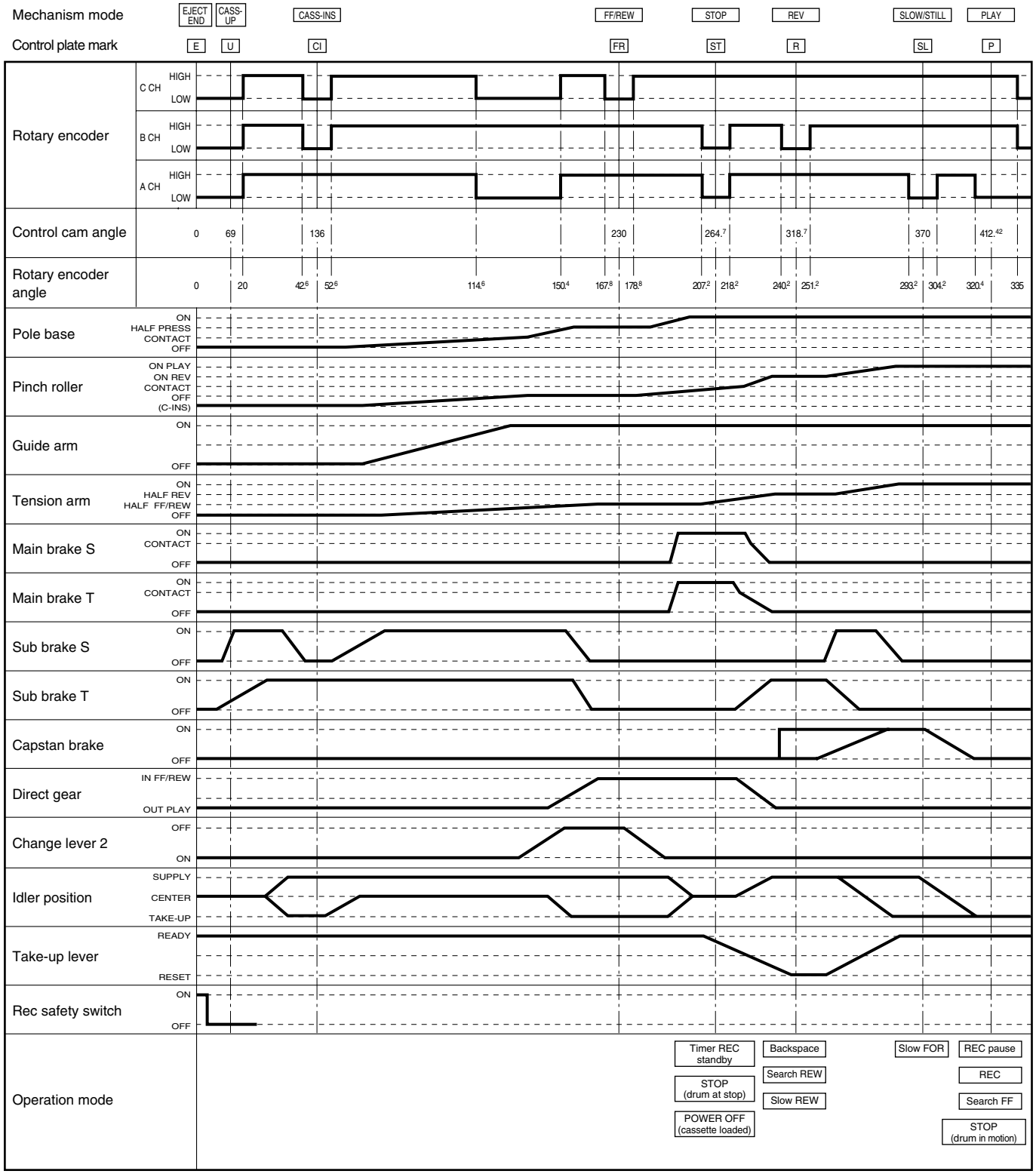



Fig. 2-3-5a

## Mechanism Timing Chart



# MECHANISM ADJUSTMENT (DV)

## 2.9 PREPARATION

### 2.9.1 Precautions

(1) Observe the specified screw tightening torque when attaching parts. The torque should be 0.04 Nm (0.4 kgfcm) unless otherwise specified.
(2) Always disconnect the power supply unit before proceeding to solder or attach parts.
(3) When plugging or unplugging a wire, be careful not to damage the connector.
(4) When replacing a part, be careful not to damage other parts or to mistakenly attach parts.

### 2.9.2 Tools Required for Adjustments

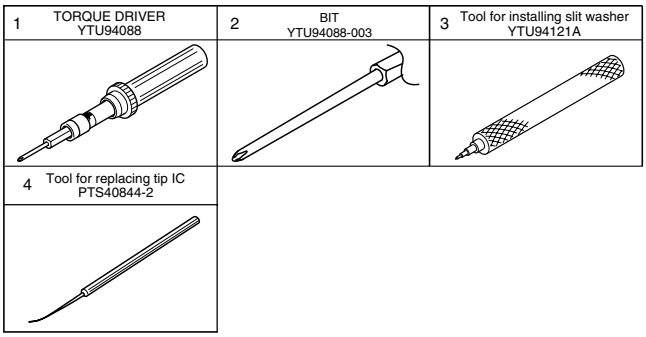

1 TORQUE DRIVER YTU94088
2 BIT YTU94088-003
3 Tool for installing slit washer YTU94121A
4 Tool for replacing tip IC PTS40844-2

Table 2-9-1 Tools Required for Adjustments

### 2.9.3 Disassembly and Assembly Procedures

The following table shows the steps for assembling or disassembling the mechanism parts. Read the following descriptions carefully before actual assembly/disassembly operations.

(1) : Order of disassembly steps. Reverse this order when assembling.
(2) : Name of the disassembled/assembled part.
(3) : Surface where the disassembled/assembled part is mounted. T = Top. B: Bottom.
(4) : Number of disassembly drawing.
(5) : Parts to be removed in disassembly/assembly, such as screws, washers and springs, and the points.

| Symbol | Name & Point |
|---|---|
| S | Screw |
| W | Washer |
| P | Spring |
| * | Connector, lock(L), soldering(SD), shield, etc. |

[Example] • (W1) = Remove the washer W1.
• (P1) = Remove the spring P1.

(6) : Notes for disassembly/assembly.
(7) : For the phase alignment in disassembly/assembly and the parts which require phase adjustments after assembly, see “2.16 MECHANISM PHASE CHECK/ADJUSTMENT”.

### 2.9.4 Screws and Washers Used in Disassembly/Assembly of the Mechanism Assembly

Table 2-9-1 shows the symbols, designs, part numbers and colors of the screws and washers used in the mechanism assembly.
When disassembling or assembling the mechanism assembly, be sure to attach screws and washers correctly by referring to the following table.

| Symbol | Part number | Color |
|---|---|---|
| (S1) | QYTDSP2004Z | GOLD |
| (S2) | YQ43893 | SILVER |
| (S3) | YQ43893-7 | BLACK |

| Symbol | Part number | Color |
|---|---|---|
| (W1) | YQ44246 | RED |
| (W2) | YQ44246-3 | BLACK |
| (W3) | YQ43933-2 | BLACK |

Table 2-9-2

| Step /Loc No. | Part Name | | Fig. No. | Point | Note | Discription |
|---|---|---|---|---|---|---|
| ① | Ⓐ Cassette housing assembly/ ⒷMechanism assembly | T | 1 | 2(S1),(L1) – (L5) | 1 | |
| ② | ① Drum assembly | T | 2 | 3(S2) | 2,3 | |
| ③ | ② Motor bracket assembly | T | 2 | 4(S2) | 2,4 | |
| ④ | ③ Middle catcher assembly | T | 3 | 3(S2) | — | |
| ↑ (1) | ↑ (2) | ↑ (3) | ↑ (4) | ↑ (5) | ↑ (6) | ↑ (7) |

## 2.10 DISASSEMBLY/ASSEMBLY OF THE MECHANISM ASSEMBLY

### 2.10.1 Introduction

The disassembly and assembly of the mechanism assembly should usually be performed in the ASSEMBLY mode. (Table 2-10-1)

Note that the mechanism is in the cassette in (C-IN) mode when the mechanism assembly is taken out of the set and that the C-IN mode should be switched to the ASSEMBLY mode in this case.

To set the ASSEMBLY mode, apply 3 V DC to the electrodes on the upper part of the loading motor as shown in Fig. 2-10-7.

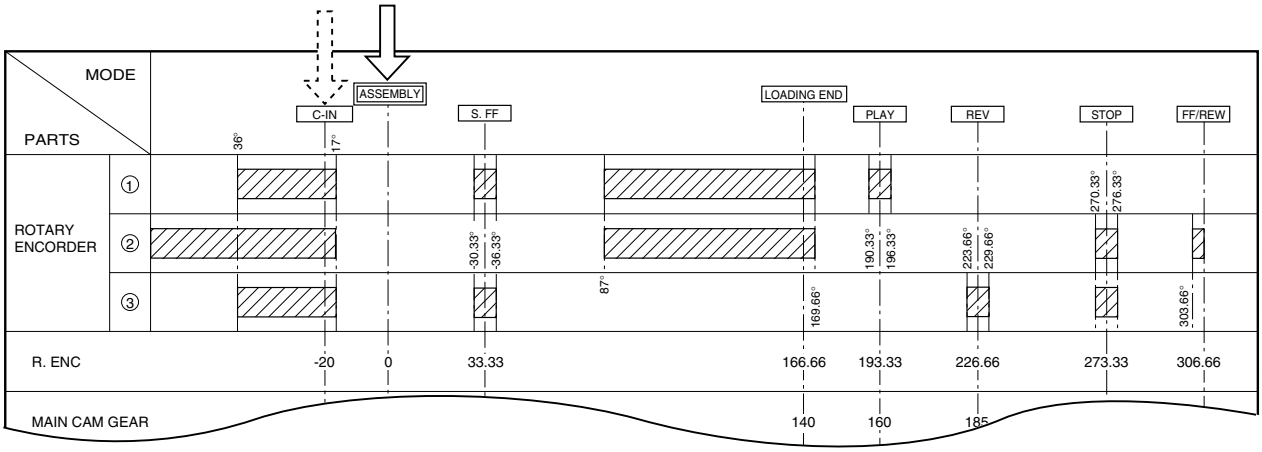



Table 2-10-1

### 2.10.2 Mechanism Modes

The mechanism has 6 modes as shown in Table 2-11-1. The current mode can be confirmed by the positioning of the " ○ " marking on the sub-cam gear and the "▲" marking on the mechanism.

See the following figures (Figs. 2-10-1 to -6) for details.

**Note:**

- ***This mechanism assembly has another ASSEMBLY mode. However, this mode cannot be identified from the markings because it corresponds to an intermediate position between the C-IN (Ⓒ) mode and S-FF (Ⓗ) mode. This mode can be confirmed by the rotary encoder phase. See Fig. 2-10-7.***

**1. Checking the mechanism mode**

<C-IN : Ⓒ>

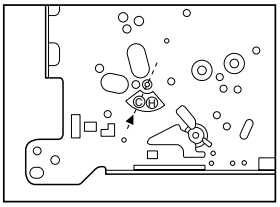


Fig. 2-10-1

<S-FF : Ⓗ>

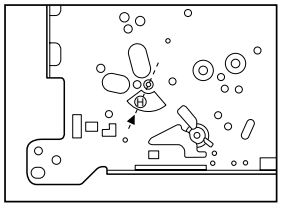


Fig. 2-10-2

<PLAY : Ⓟ>

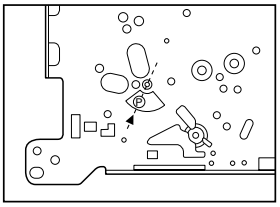


Fig. 2-10-3

<REV : Ⓡ>

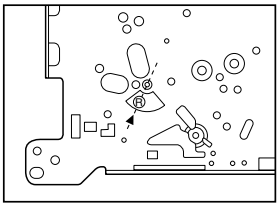


Fig. 2-10-4

<STOP : Ⓢ>

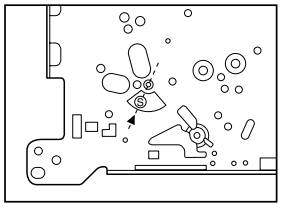


Fig. 2-10-5

<FF/REW : Ⓕ>

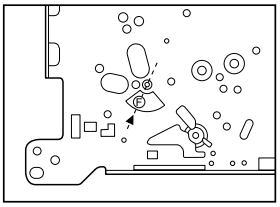


Fig. 2-10-6

**2. Setting/checking the ASSEMBLY mode**

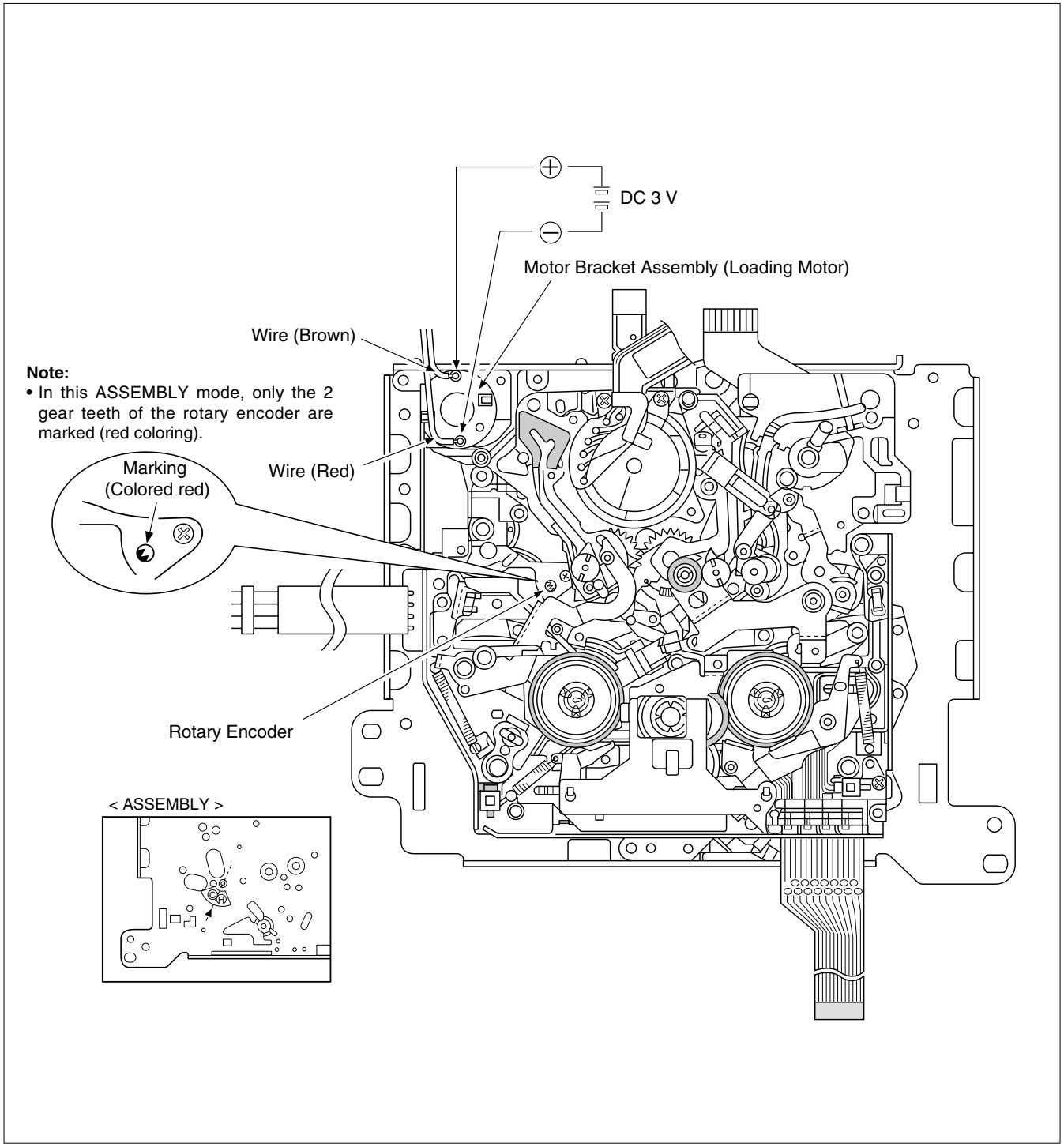

DC 3 V
Motor Bracket Assembly (Loading Motor)
Wire (Brown)
Note:
• In this ASSEMBLY mode, only the 2 gear teeth of the rotary encoder are marked (red coloring).
Wire (Red)
Marking
(Colored red)
Rotary Encoder
< ASSEMBLY >

Fig. 2-10-7

## 2.11 MECHANISM TIMING CHART

See following table (Table 2-11-1).

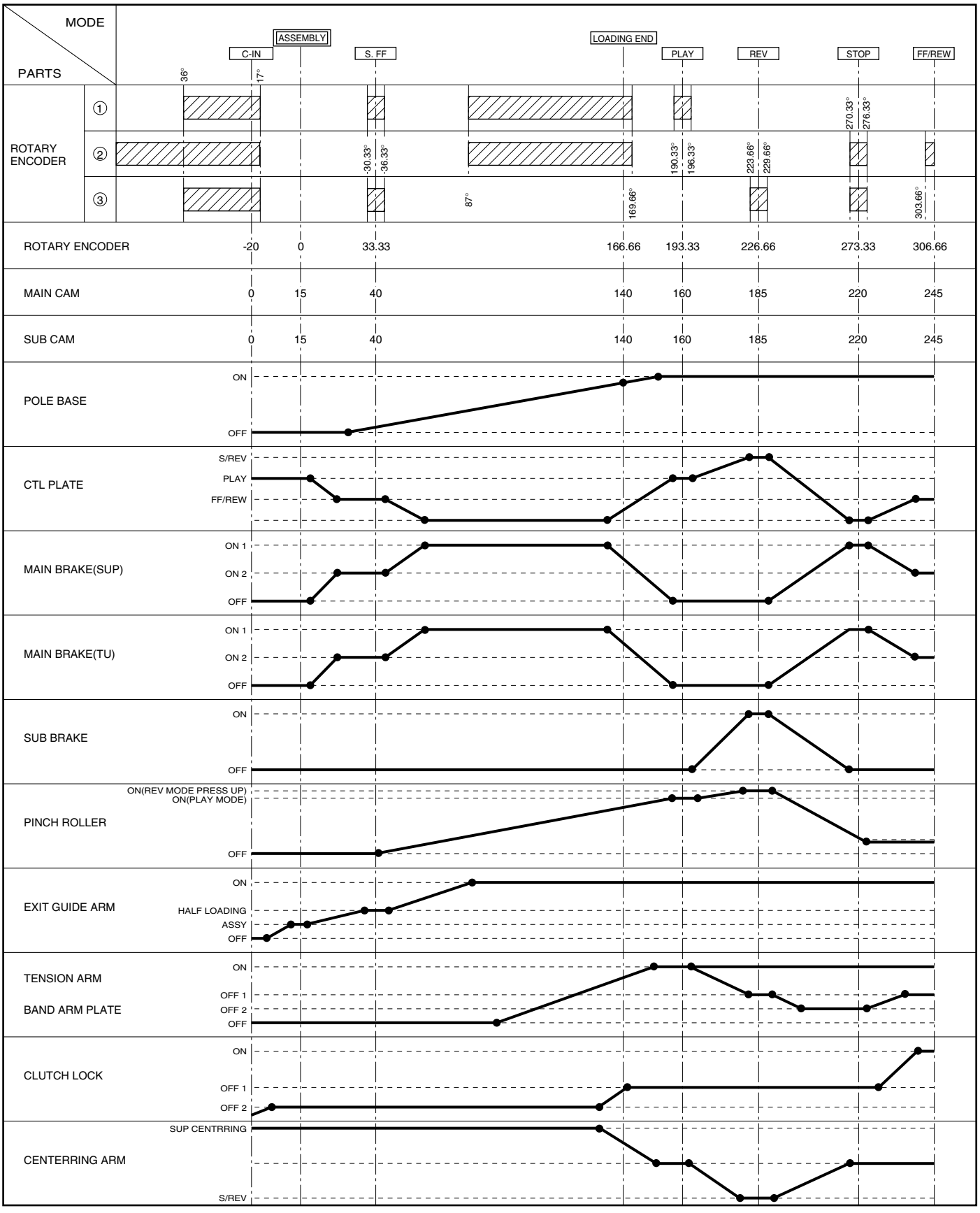



Table 2-11-1

## 2.12 MECHANISM ASSEMBLY/DISASSEMBLY PROCEDURE TABLE

| Step /Loc No. | Part Name | | Fig. No. | Point | Note | Discription |
|---|---|---|---|---|---|---|
| 1 | Ⓐ Cassette housing assembly/ Ⓑ Mechanism assembly | T | 2-13-1 | 2(S1),(L1) – (L5) | 1 | |
| 2 | ① Drum assembly | T | 2-13-2 | 3(S2) | 2,3 | |
| 3 | ② Motor bracket assembly | T | 2-13-2 | 4(S2) | 2,4 | |
| 4 | ③ Middle catcher assembly | T | 2-13-3 | 3(S2) | — | |
| 5 | ④ Reel cover assembly | T | 2-13-3 | (S2), 2(L6) | 5 | |
| 6 | ⑤ Pinch roller arm assembly | T | 2-13-4 | (W1), (L7) | 6 | |
| 7 | ⑥ Sub brake assembly | T | 2-13-4 | (P1), (W1), (L8) | — | |
| 8 | ⑦ Band arm plate sub assembly | T | 2-13-4 | (S3), (L9), (P2), (W2) | 7,8 | |
| 9 | ⑧ Tension arm sub assembly | T | 2-13-4 | (P3) | 8 | |
| 10 | ⑨ EXIT guide arm assembly | T | 2-13-5 | (W1) | — | |
| 11 | ⑩ Swing arm assembly | T | 2-13-5 | — | — | Position alignment |
| 12 | ⑪ Sub deck assembly | T | 2-13-6 | 4(S2) | 9 | Position alignment |
| 13 | ⑫ Main brake (Sup) assembly | T | 2-13-6 | (P4), (L10) | — | |
| 14 | ⑬ Main brake (Take up) assembly | T | 2-13-6 | (P5), (L11) | — | |
| 15 | ⑭ Reel disk assembly (Sup) | T | 2-13-7 | — | — | |
| 16 | ⑮ Reel disk assembly (Take up) | T | 2-13-7 | — | — | |
| 17 | ⑯ Prism | T | 2-13-7 | (S2) | — | |
| 18 | ⑰ Control plate | T | 2-13-7 | 2(L12) | — | |
| 19 | ⑱ Guide rail (Take up) assembly | T | 2-13-8 | 4(S2) | 10 | Position alignment |
| 20 | ⑲ Guide rail (Sup) assembly | T | 2-13-8 | (S2), 2(L13) | 10 | Position alignment |
| 21 | ⑳ Base plate assembly | T | 2-13-8 | (S2), 2(L14) | — | |
| 22 | ㉑ Ent. guide base assembly | T | 2-13-9 | (S2) | — | |
| 23 | ㉒ Worm wheel 2 | T | 2-13-9 | — | 11 | Phase alignment |
| 24 | ㉓ Timing belt | T | 2-13-9 | — | — | |
| 25 | ㉔ Center gear assembly | T | 2-13-9 | — | — | |
| 26 | ㉕ Reel drive pulley assembly | T | 2-13-10 | (W1) | — | |
| 27 | ㉖ Push plate | T | 2-13-10 | (W1) | — | |
| 28 | ㉗ Clutch lock gear(2) | T | 2-13-10 | (W3) | — | |
| 29 | ㉘ Clutch lock gear (1) | T | 2-13-10 | (P6) | — | |
| 30 | ㉙ Tension control arm assembly | T | 2-13-11 | (L15) | 12 | Position alignment |
| 31 | ㉚ Brake control arm assembly | T | 2-13-11 | (W1), (L16) | 12 | Position alignment |
| 32 | ㉛ Charge arm assembly | T | 2-13-11 | (L17) | 13 | Position alignment |
| 33 | ㉜ Connect gear 2 | T | 2-13-12 | (S2) | — | (Phase alignment) |
| 34 | ㉝ Connect gear 2 | T | 2-13-12 | (S2) | — | (Phase alignment) |
| 35 | ㉞ Rotary encoder assembly | T | 2-13-13 | 2(S2) | 14 | Phase alignment |
| 36 | ㉟ Main cam | T | 2-13-13 | (W1) | 15 | Phase alignment |
| 37 | ㊱ Arm gear 1 assembly | T | 2-13-13 | Collar | 15,16 | Position alignment |
| 38 | ㊲ Centering arm assembly | T | 2-13-13 | (L18) | 15 | Position alignment |
| 39 | ㊳ Sub cam | T | 2-13-14 | (S2) | 17 | Phase alignment |
| 40 | ㊴ Arm gear 2 assembly | T | 2-13-14 | — | 17 | Position alignment |
| 41 | ㊵ Clutch lock lever assembly | T | 2-13-14 | (L19) | 17,18 | Position alignment |
| 42 | ㊶ Capstan motor | T | 2-13-15 | (P7), Adjust nut | — | Vertical adjustment |
| 43 | ㊷ Drum base deck | T | 2-13-15 | 3(S2) | — | |

Table 2-12-1

**TOP VIEW**

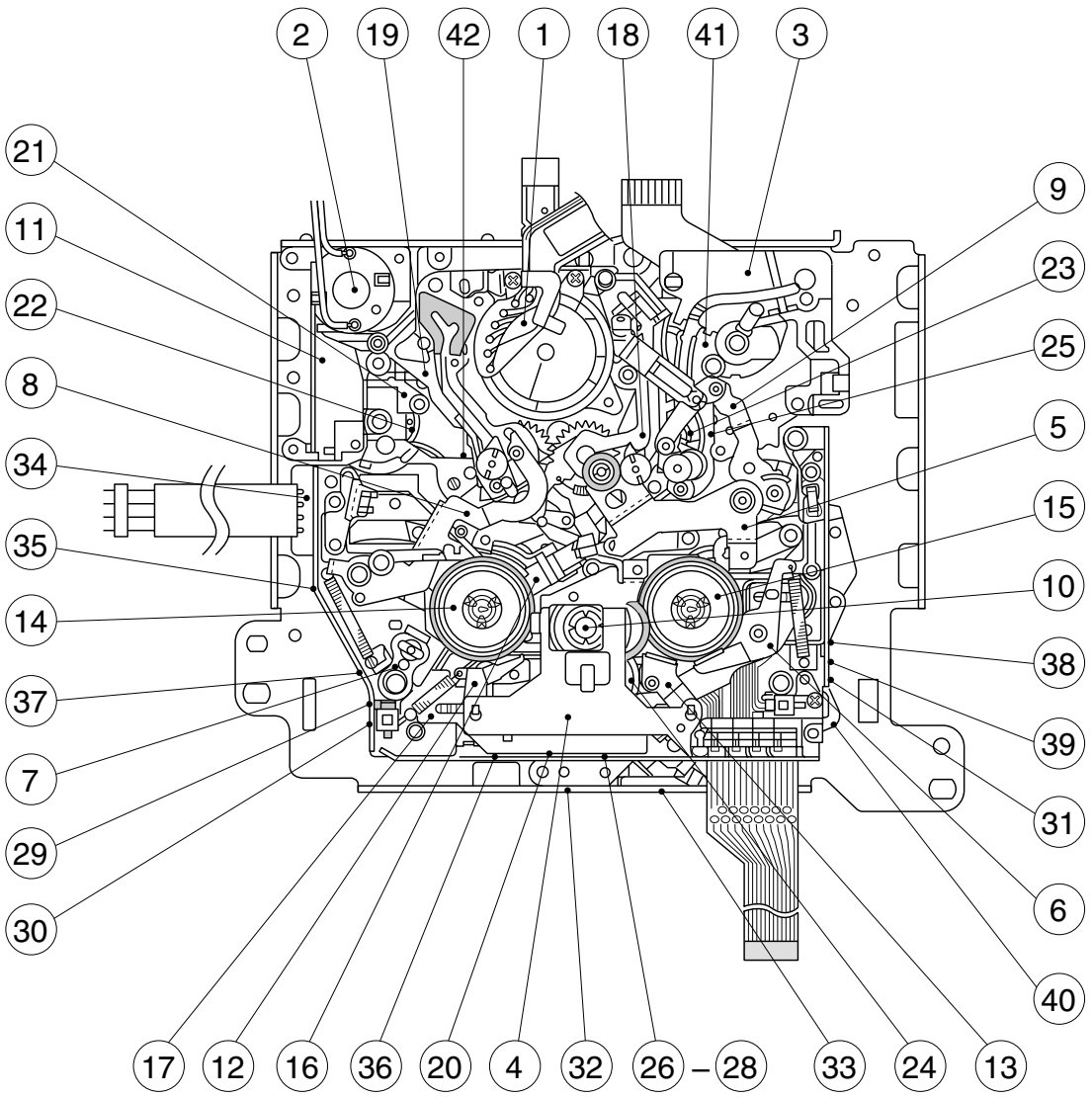



Fig. 2-12-1

## 2.13 DISASSEMBLY/ASSEMBLY

### 1. Ⓐ Cassette Housing Assembly/ Ⓑ Mechanism Assembly

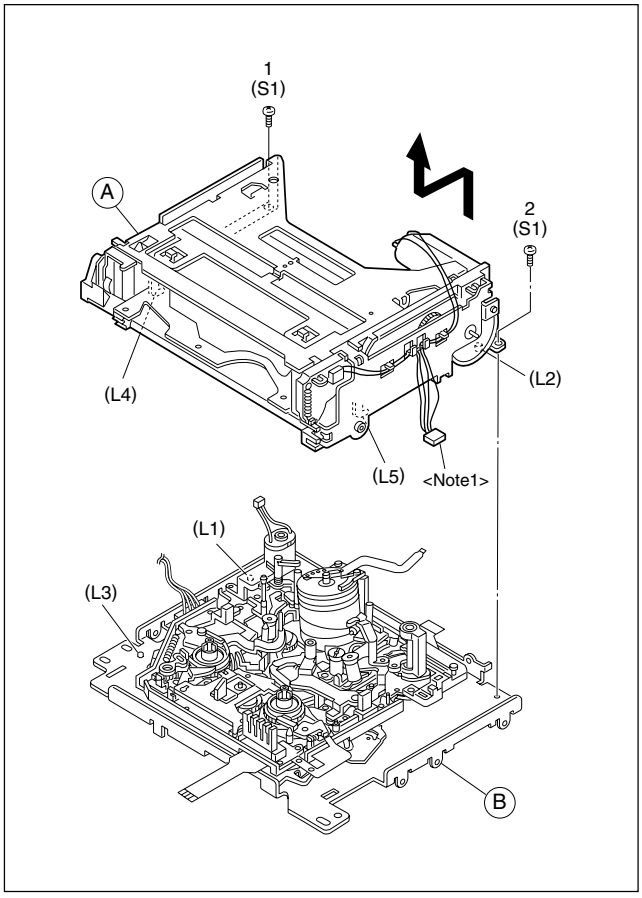



Fig. 2-13-1

**<Note 1> :** If the wires for the cassette housing motor are connected to the circuit board, remove them before disassembly.

### 2. ① Drum assembly / ② Motor bracket assembly

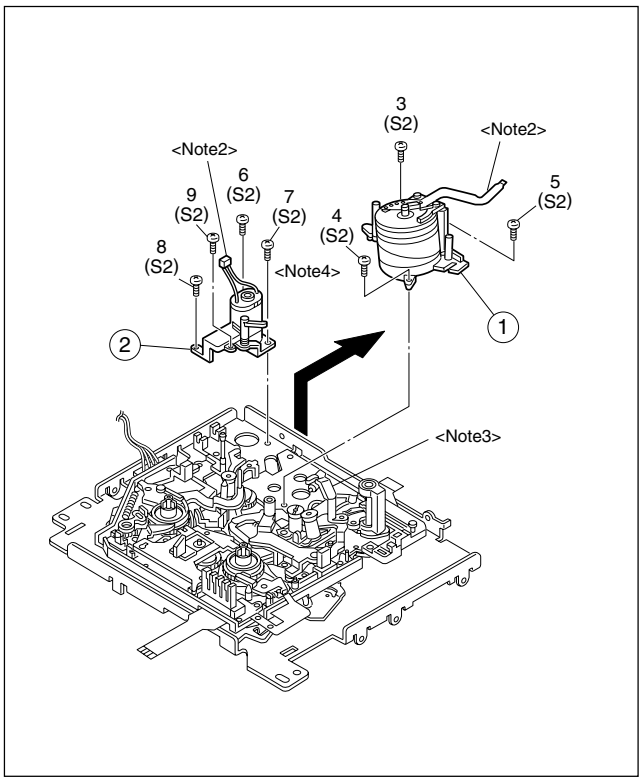



Fig. 2-13-2

**<Note 2> :** If wires are connected to the circuit board, remove them before disassembly.

**<Note 3> :** Be careful not to damage the drum assembly when removing it.

**<Note 4> :** The bracket (DV) may come in the way of removal of screw (7). Be sure to remove the bracket before proceeding to the screw removal.

### 3. ③ Middle Catcher Assembly/ ④ Reel Cover Assembly

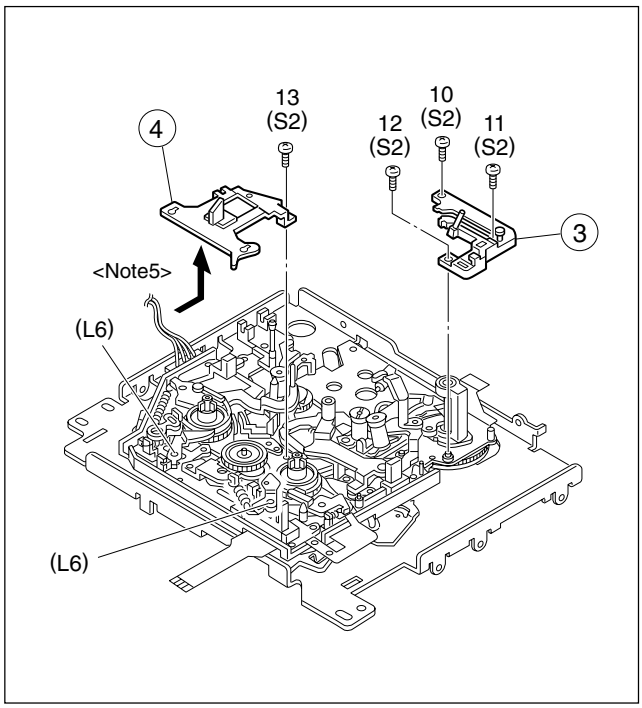



Fig. 2-13-3

**<Note 5> :** Once the reel cover assembly has been removed, the parts located below it tend to slip out easily: Be careful.

### 4. ⑤ Pinch Roller Arm Assembly/ ⑥ Sub Brake Assembly/ ⑦ Band Arm Plate Sub Assembly/ ⑧ Tension Arm Sub Assembly

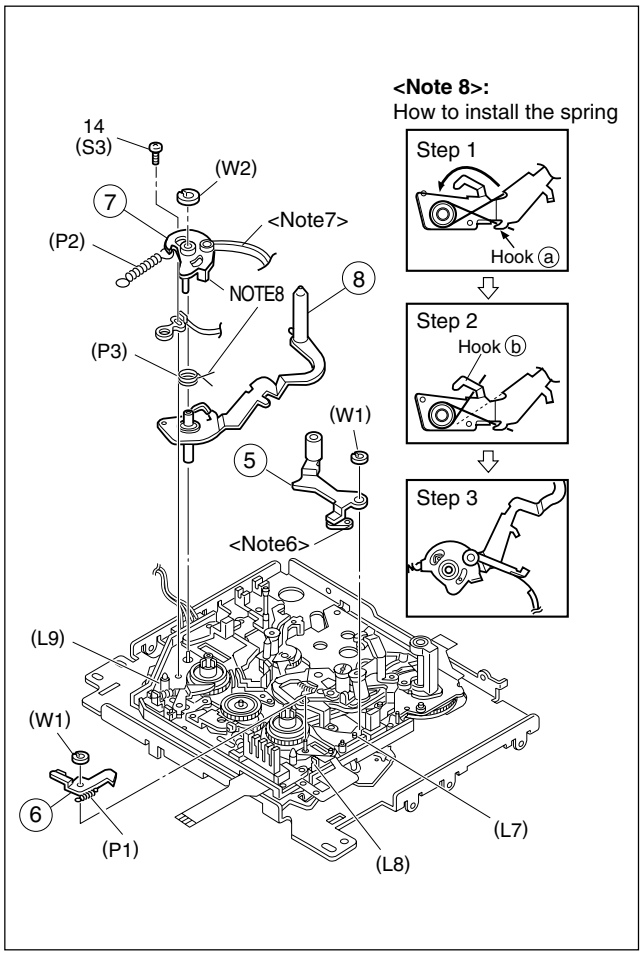



Fig. 2-13-4

**<Note 6> :** When attaching this part, fit it in the boss (L7) on the charge arm assembly.

**<Note 7> :** When attaching or removing this part, take care of the handling of the band section.

**<Note 8> :** After fitting the spring on the shaft, engage it with hook ⓐ first then with hook ⓑ.
After attaching it, set it to the positioning shown in “Step 3” and confirm that band arm plate sub assembly ⑦ can be rotated in the direction of the arrow as shown below.

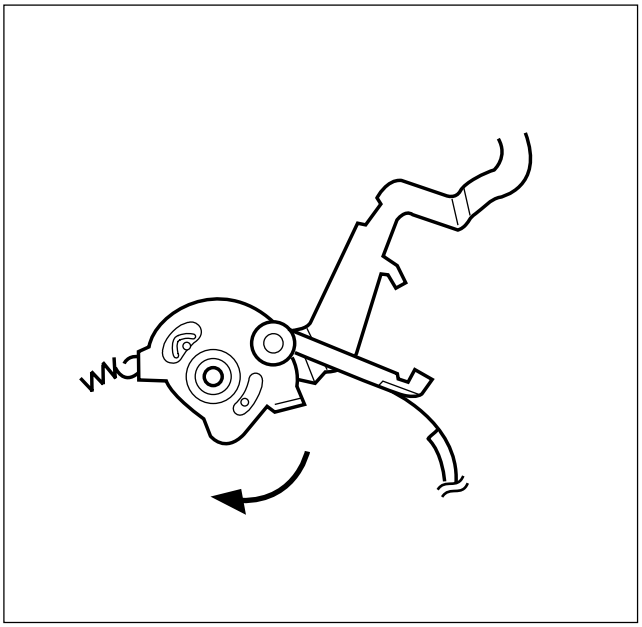


Fig. 2-13-4A

**5. ⑨ EXIT Guide Arm Assembly/ ⑩ Swing Arm Assembly**

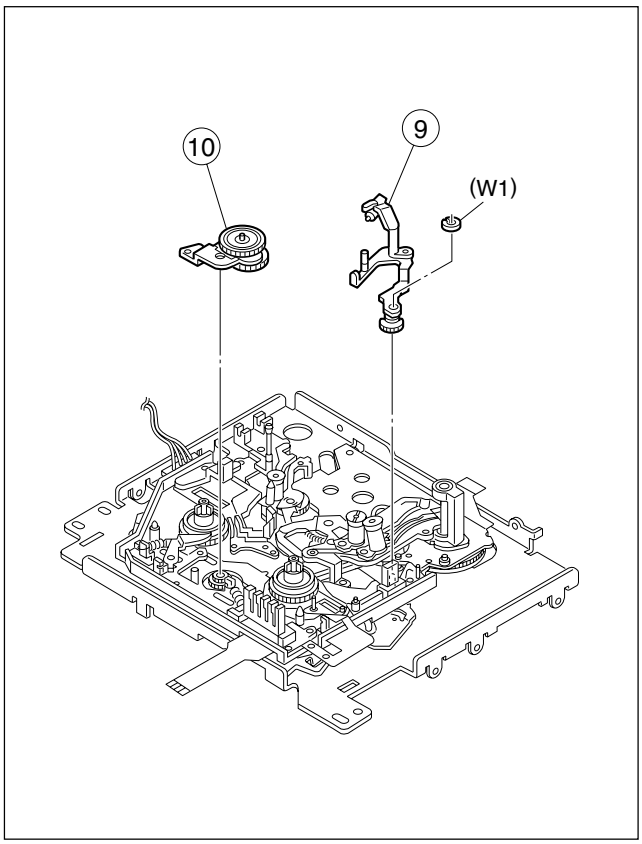



Fig. 2-13-5

**6. ⑪ Sub Deck Assembly/ ⑫ Main Brake (Sup) Assembly/ ⑬ Main Brake (Take up) Assembly**

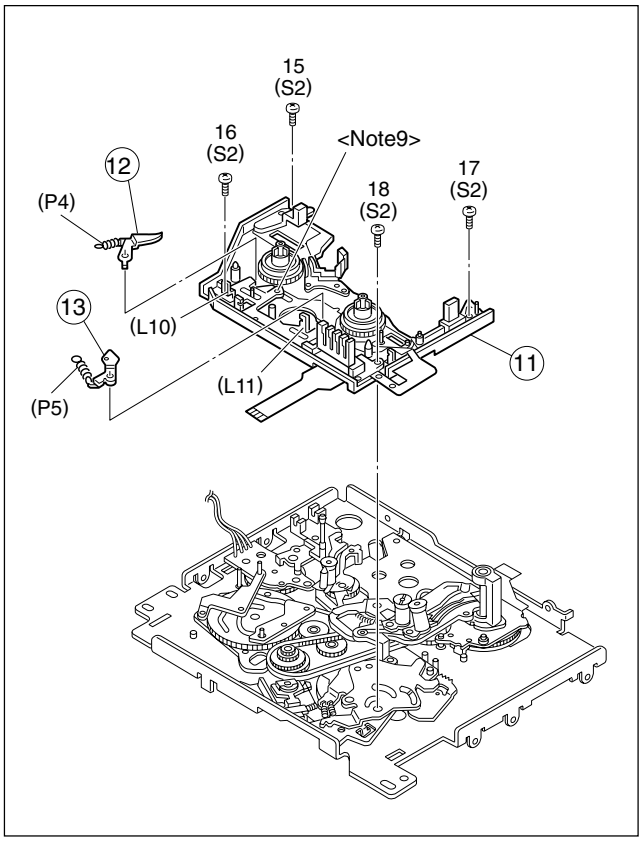



Fig. 2-13-6

**<Note 9> :** When attaching the sub deck assembly, make sure to adjust the phase of the control plate.

**7. ⑭ Reel disk assembly (Sup) / ⑮ Reel disk assembly (Take up) / ⑯ Prism / ⑰ Control plate**

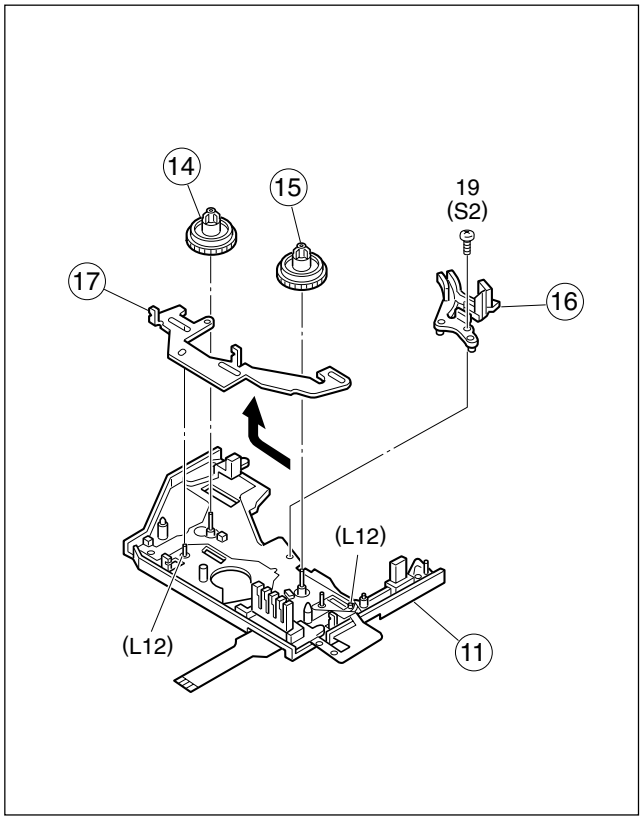



Fig. 2-13-7

**8. ⑱ Guide rail (Take up) assembly / ⑲ Guide rail (Sup) assembly / ⑳ Base plate assembly**

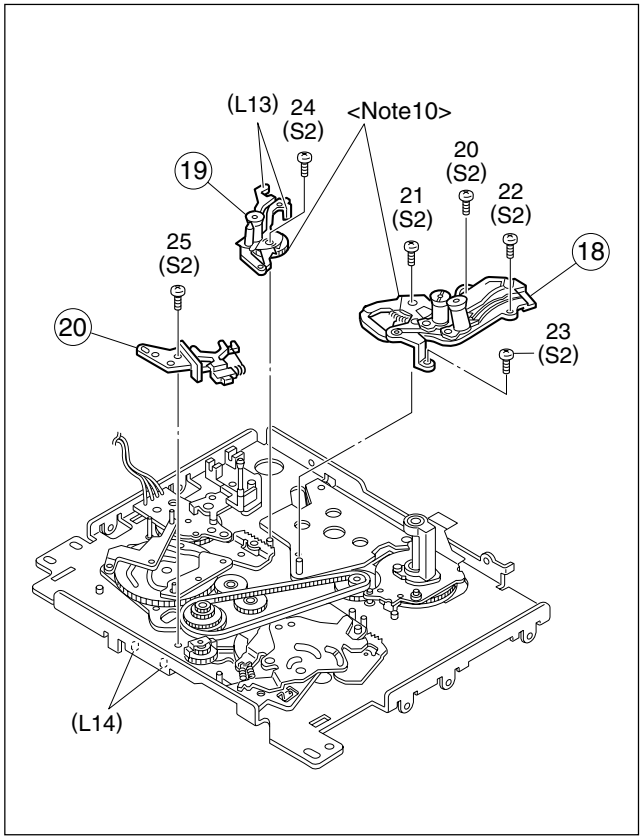



Fig. 2-13-8

**<Note 10> :** When attaching, set the alignment markings of the two gears so that the markings face opposite to each other.

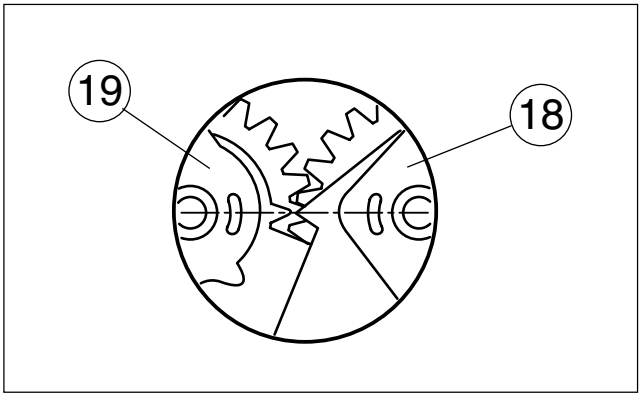



Fig. 2-13-8A

**9. ㉑ Ent. guide base assembly / ㉒ Worm wheel 2 / ㉓ Timing belt / ㉔ Center gear assembly**

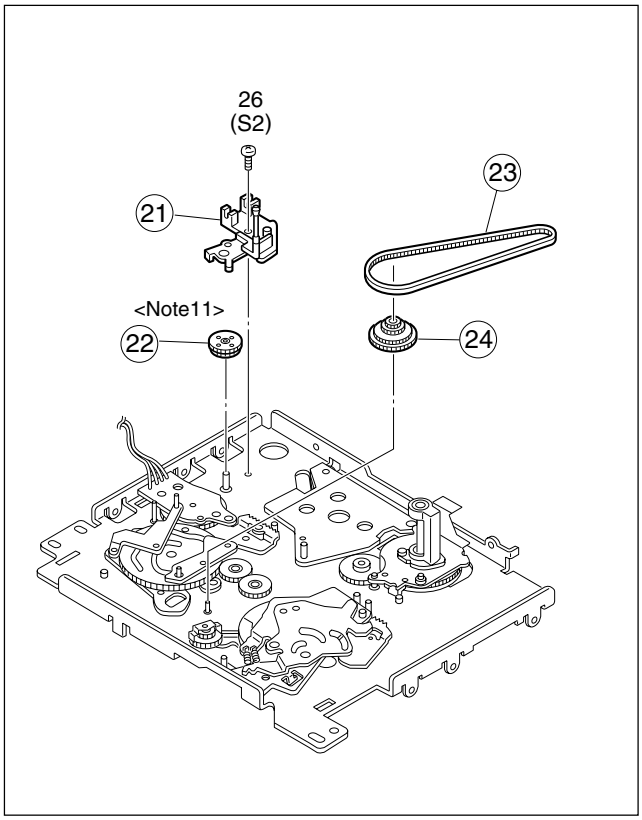



Fig. 2-13-9

**10. ㉕ Reel drive pulley assembly / ㉖ Push plate ㉗ Clutch lock gear(2) / ㉘ Clutch lock gear (1)**

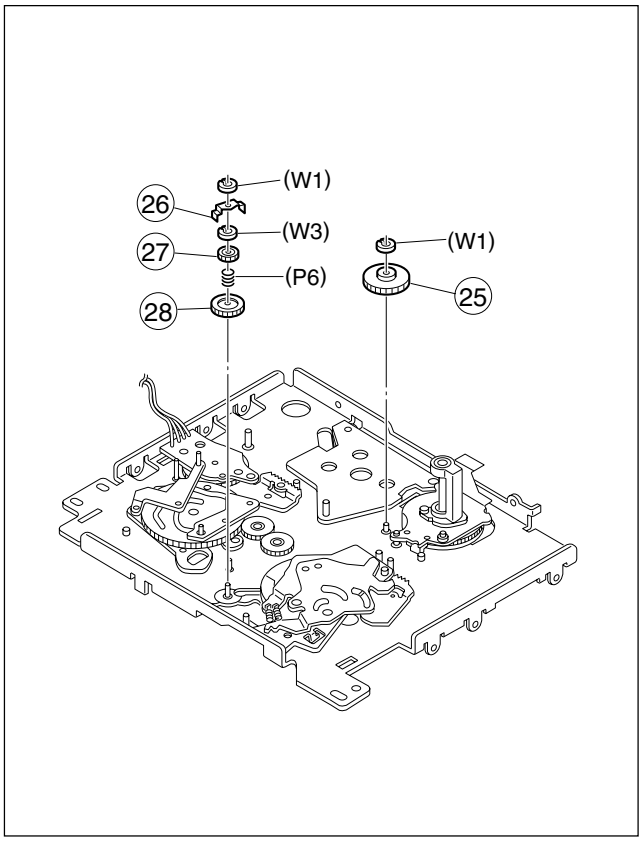
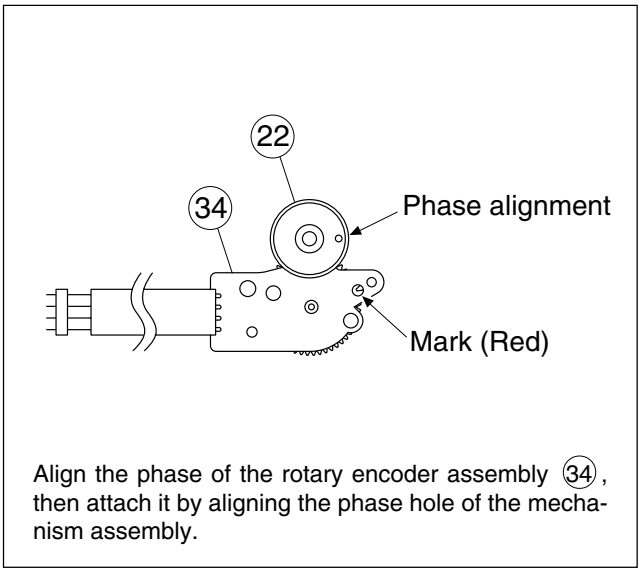



Fig. 2-13-10

**<Note 11> :** How to attach the worm wheel 2 ㉒ .




Align the phase of the rotary encoder assembly ㉞, then attach it by aligning the phase hole of the mechanism assembly.

Fig. 2-13-9A

**11. ㉙ Tension control arm assembly/ ㉚ Brake control arm assembly / ㉛ Charge arm assembly**

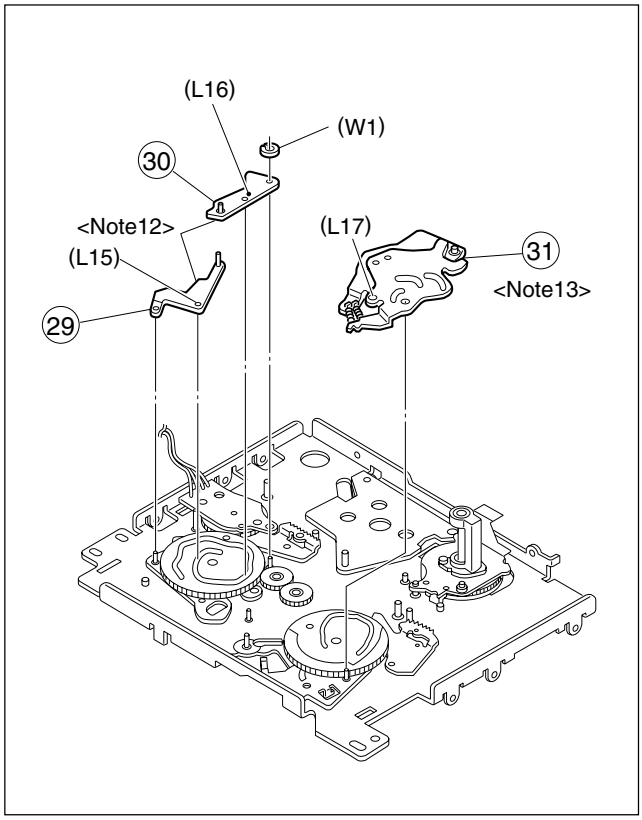



Fig. 2-13-11

**12. ㉜ Connect gear 2 / ㉝ Connect gear 2**

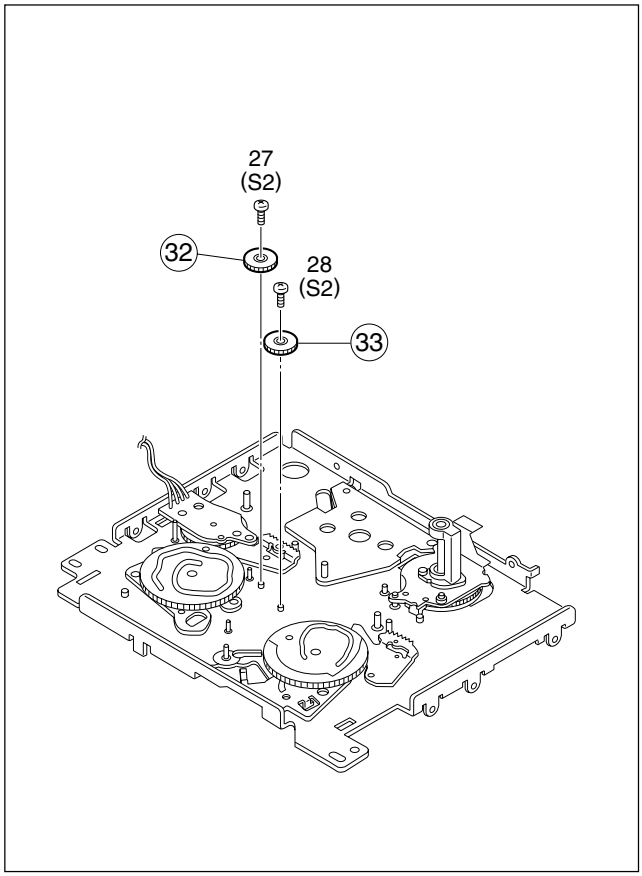
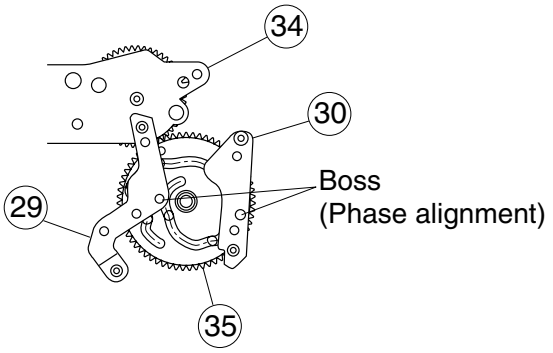



Fig. 2-13-12

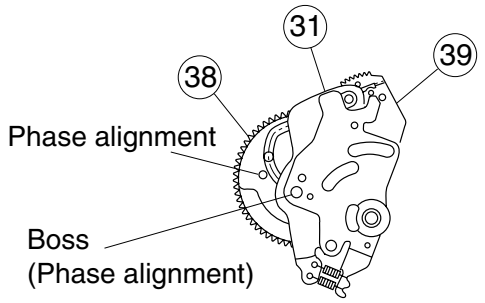
**<Note 12> :** How to attach the tension control arm assembly ㉙ / Brake control arm assembly ㉚ .




Align the phase of the main cam ㉟ , then attach it by fitting the bosses into the cam slot.

Fig. 2-13-11A

**<Note 13> :** How to attach the charge arm assembly ㉛ .




Align the phase of the sub cam ㊳ , then attach it by fitting the boss into the cam slot.

Fig. 2-13-11B

**13. ㉞ Rotary encoder assembly / ㉟ Main cam / ㊱ Arm gear 1 assembly / ㊲ Centering arm assembly**

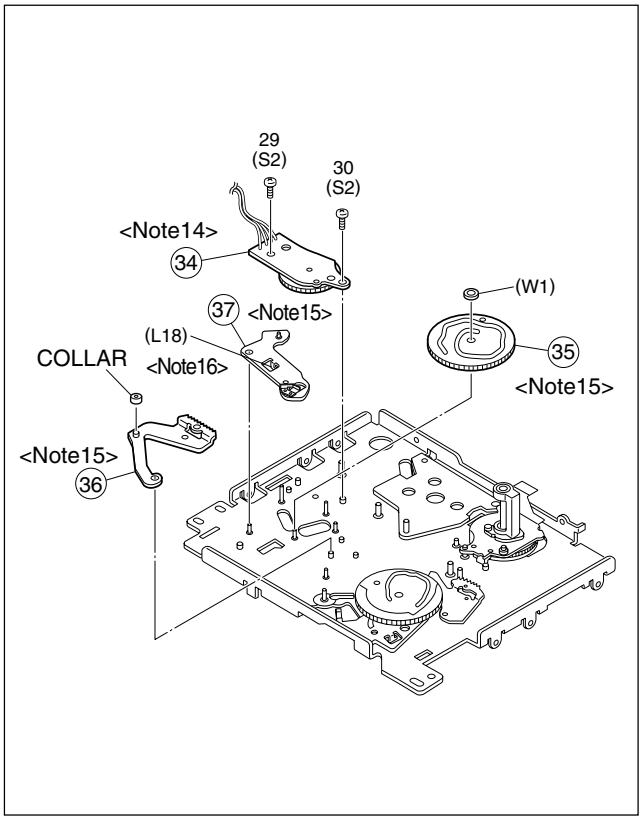
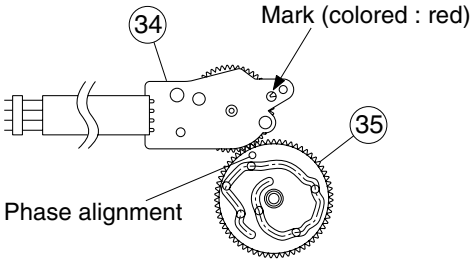



Fig. 2-13-13

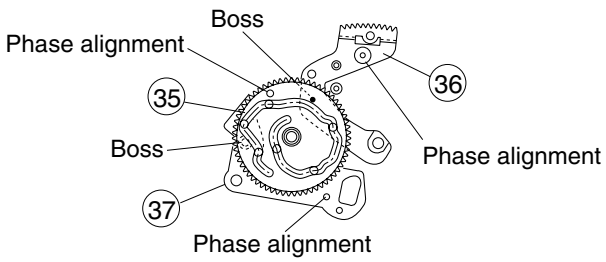
**<Note 14> :** How to attach the rotary encoder assembly ㉞ .




Align the phase of the main cam ㉟ , then attach it by placing the (red) coloured markings (on 2 gear teeth) within the encircled area.

Fig. 2-13-13A

**<Note 15> :** How to attach the main cam ㉟ .




Align the phases of the arm gear 1 assembly ㊱ and centering arm assembly ㊲, then attach the arm gear 1 assembly ㊱ /centering arm assembly ㊲ by fitting the bosses into the lower cam slot, and fit the slit washer.

Fig. 2-13-13B

**<Note 16> :** How to remove the centering arm assembly ㊲
The center arm assembly is located behind the mechanism assembly when the phase is aligned correctly. The center arm assembly can be removed by displacing it in the direction of the arrow.

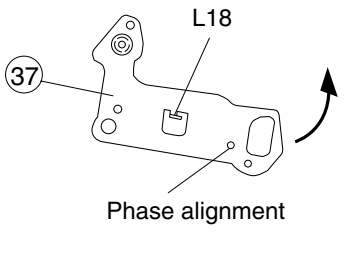



Fig. 2-13-13C

**14. ㊳ Sub cam / ㊴ Arm gear 2 assembly / ㊵ Clutch lock lever assembly**

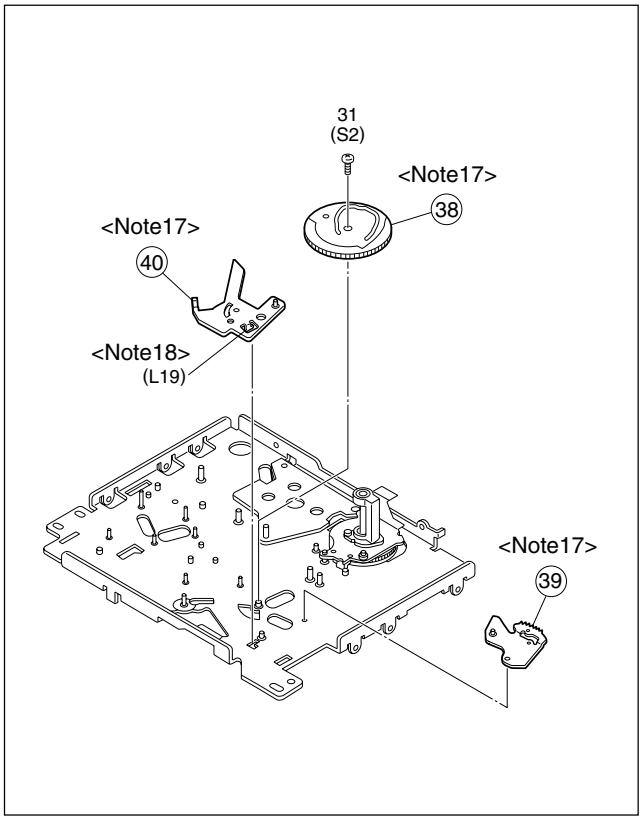



Fig. 2-13-14

**15. ㊶ Capstan motor / ㊷ Drum base deck**

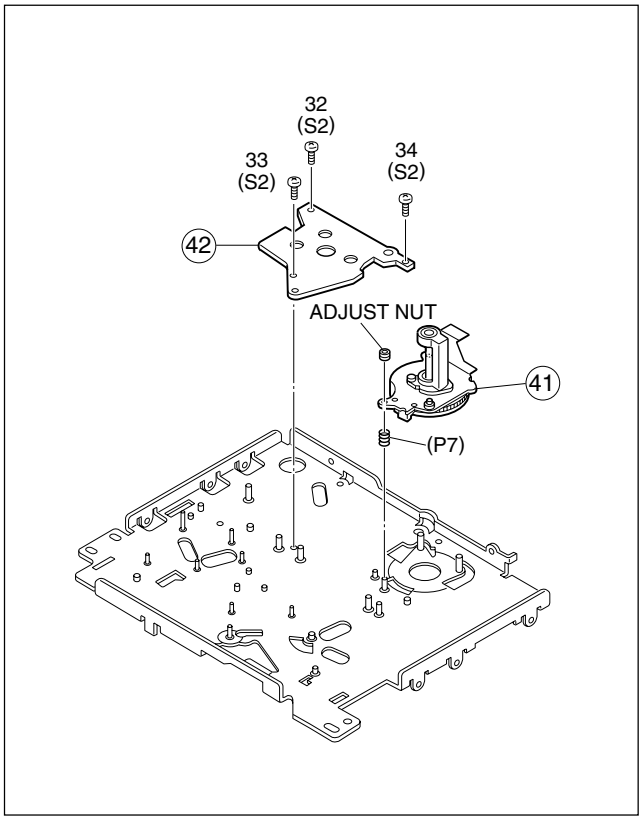
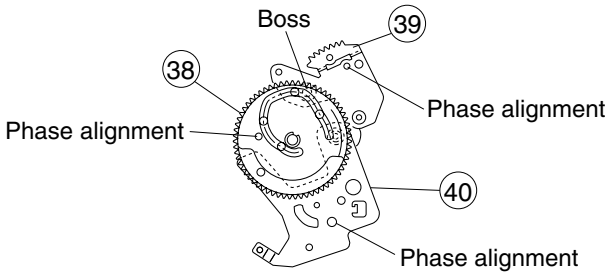



Fig. 2-13-15

**<Note 17> :** How to attach the sub cam ㊳ .




Align the phases of the arm gear 2 assembly ㊴ and clutch lock lever assembly ㊵ , then attach them by fitting the boss into the lower cam slot and tighten the screws.

Fig. 2-13-14A

**<Note 18> :** How to remove the clutch lock lever assembly ㊵
L19 is located behind the mechanism assembly when the phase is aligned correctly. The clutch lock lever assembly can be removed by displacing it in the direction of the arrow.

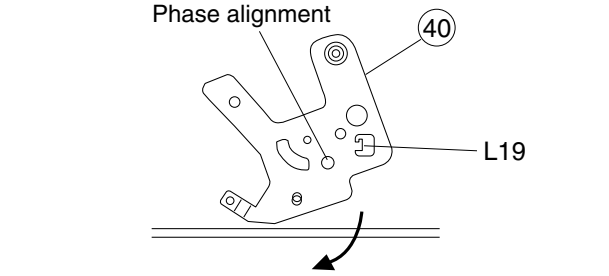
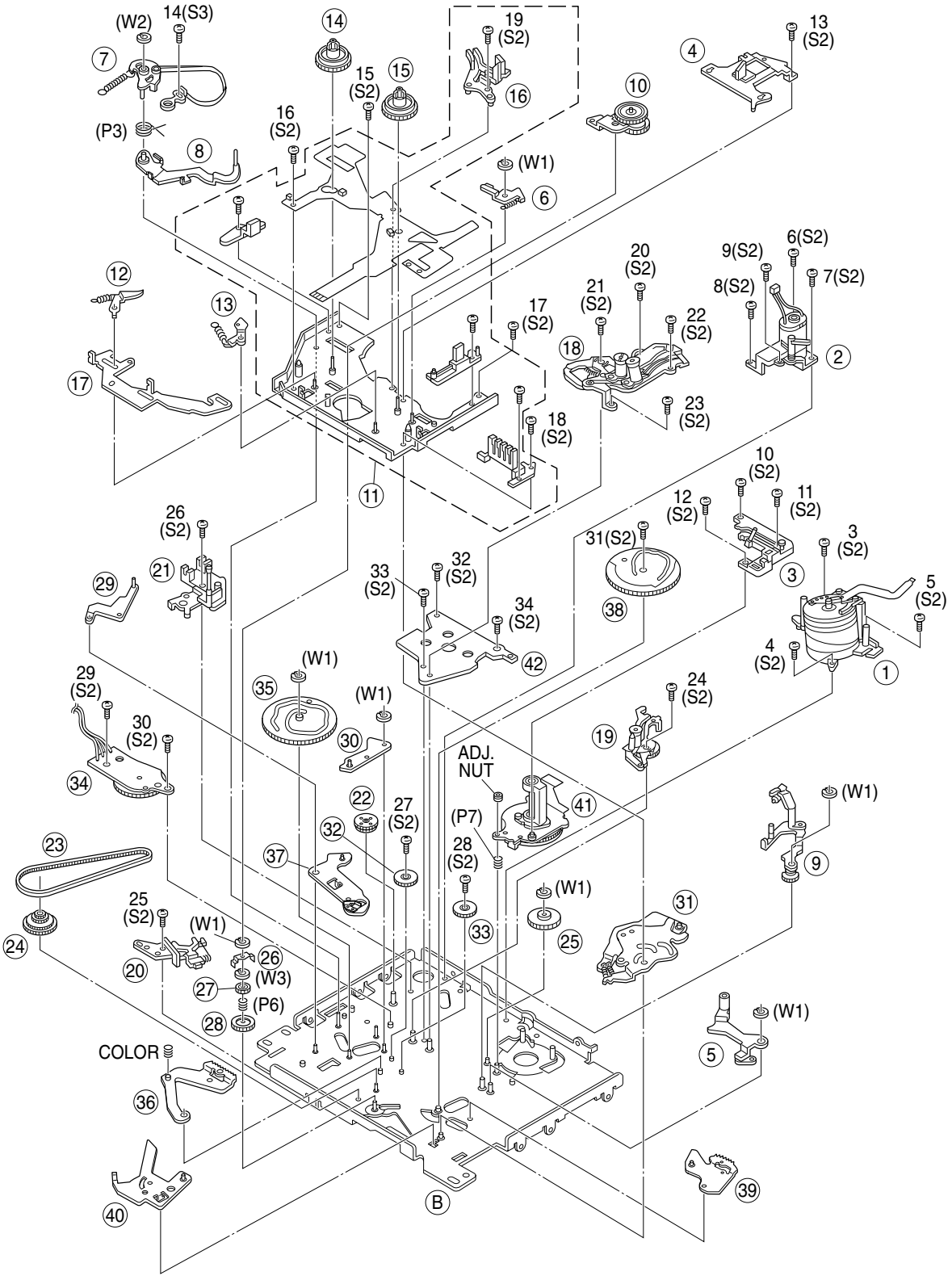



Fig. 2-13-14B

## 2.14 LIST OF PROCEDURES FOR DISASSEMBLY




**Note :**

- For the greasing and oiling locations, see “SECTION 5 PARTS LIST” (Page 5-6).

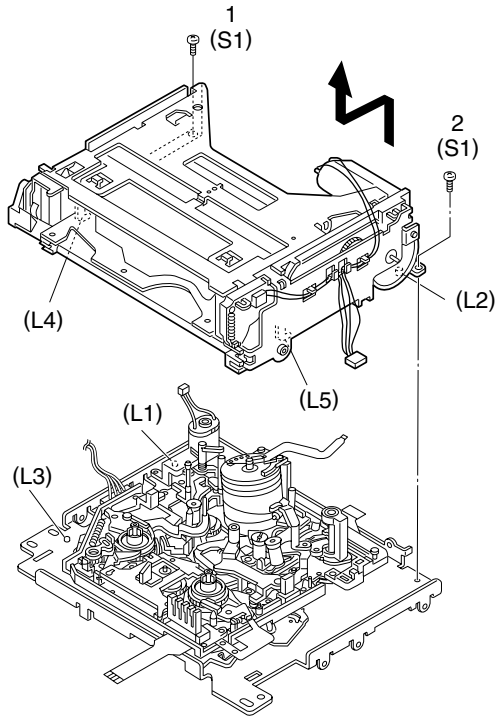
Fig. 2-14-1

## 2.15 MECHANISM DISASSEMBLY/ASSEMBLY SHEET

Screw Management Table

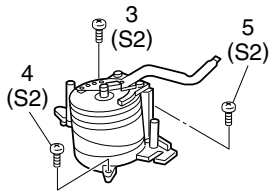
| Fig. No. | Ⓐ | | ① | | | ② | | | | ③ | | | ④ | ⑦ | ⑪ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Type | S1 | S1 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S3 | S2 | S2 | S2 | S2 |
| Attachin | | | | | | | | | | | | | | | | | | |
| Ref. Fig. | 2-13-1 | | 2-13-2 | | | | | | | 2-13-3 | | | | 2-13-4 | 2-13-6 | | | |

Ⓐ Cassette housing assembly



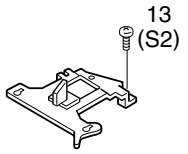

S1×2, L1-L5

① Drum assembly



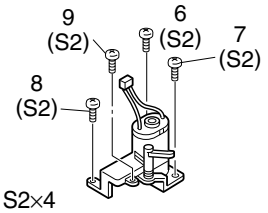

S2×3

④ Reel cover assembly



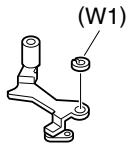

S2, L6×2

② Motor bracket assembly



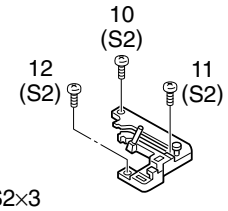

S2×4

⑤ Pinch roller arm assembly



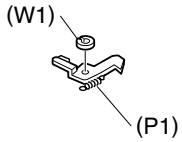

W1, L7

③ Middle catcher assembly



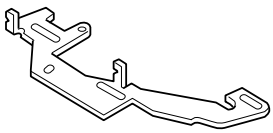

S2×3

⑥ Sub brake assembly



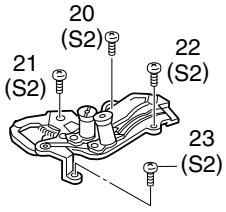

P1, W1, L8

⑰ Control plate



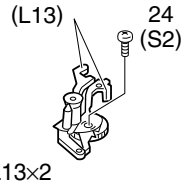
L12×2

⑱ Guide rail (Take up) assembly




S2×4

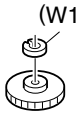
⑲ Guide rail (Sup) assembly




S2, L13×2

㉔ Center gear assembly

㉕ Reel drive pulley assembly

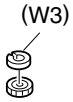



W1

㉖ Push plate

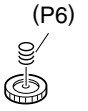
W1

㉗ Clutch lock gear (2)



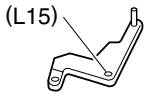

W3

㉘ Clutch lock gear (1)



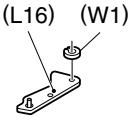

P6

㉙ Tension control arm assembly



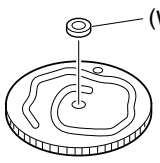

L15

㉚ Brake control arm assembly



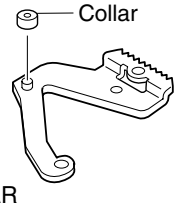

W1, L16

㉟ Main cam



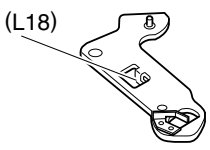

W1

㊱ Arm gear 1 assembly



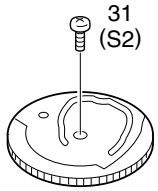

COLLAR

㊲ Centering arm assembly




L18

㊳ Sub cam

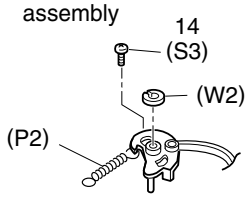



S2

Fig. 2-15-1A

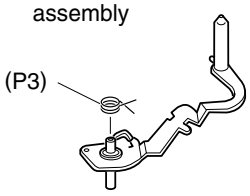
| ⑯ | ⑱ | | | | ⑲ | ⑳ | ㉑ | ㉜ | ㉝ | ㉞ | | ㊳ | ㊷ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 | S2 |
| | | | | | | | | | | | | | | | |
| 2-13-7 | 2-13-8 | | | | | | 2-13-9 | 2-13-12 | | 2-13-13 | | 2-13-14 | 2-13-15 | | |

⑦ Band arm plate sub assembly



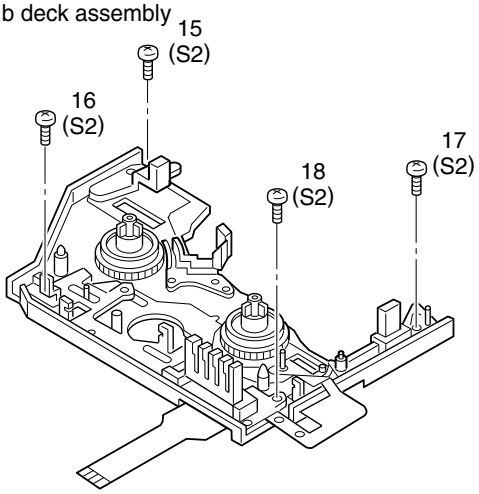

S3, P2, L9, W2

⑧ Tension arm sub assembly



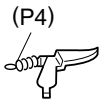

P3

⑪ Sub deck assembly




S2×4

⑫ Main Brake(Sup) assembly




P4, L10

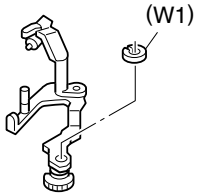
⑬ Main Brake(Take up) assembly

P5, L11

⑭ Reel disk assembly (Sup)

⑮ Reel disk assembly (Take up)

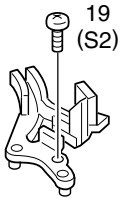
⑨ EXIT guide arm assembly




W1

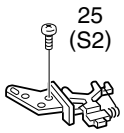
⑩ Swing arm assembly

⑯ Prism



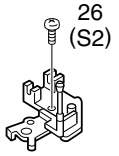

S2

⑳ Base plate assembly




S2, L14×2

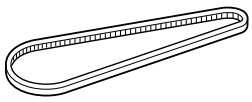
㉑ Ent. guide base assembly




S2

㉒ Worm wheel 2

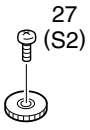
㉓ Timing belt



㉛ Charge arm assembly

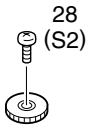
L17

㉜ Connect gear 2



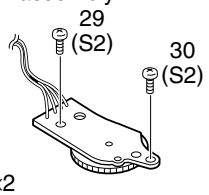

S2

㉝ Connect gear 2



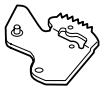

S2

㉞ Rotaly encoder assembly

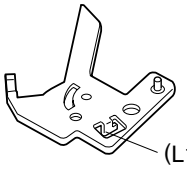



S2×2

㊴ Arm gear 2 assembly

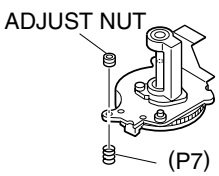


㊵ Clutch lock lever assembly



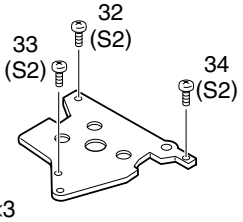

L19

㊶ Capstan motor




ADJUST NUT, P7

㊷ Drum base deck




S2×3

Fig. 2-15-1B

## 2.16 MECHANISM PHASE CHECK/ADJUSTMENT

See Fig. 2-16-1.

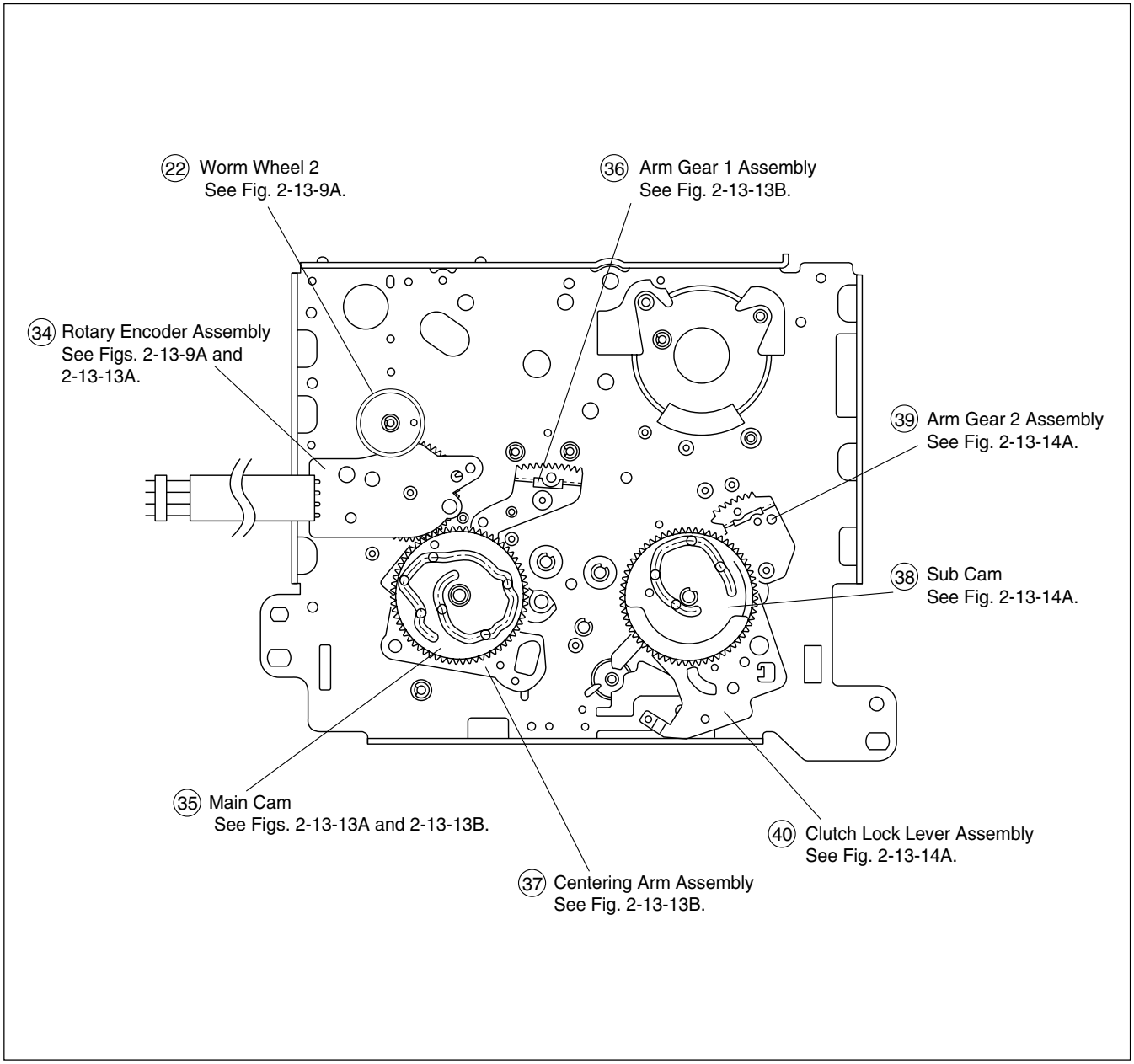



Fig. 2-16-1

## 2.17 POSITIONING THE TENSION POLE

See Fig. 2-17-1.

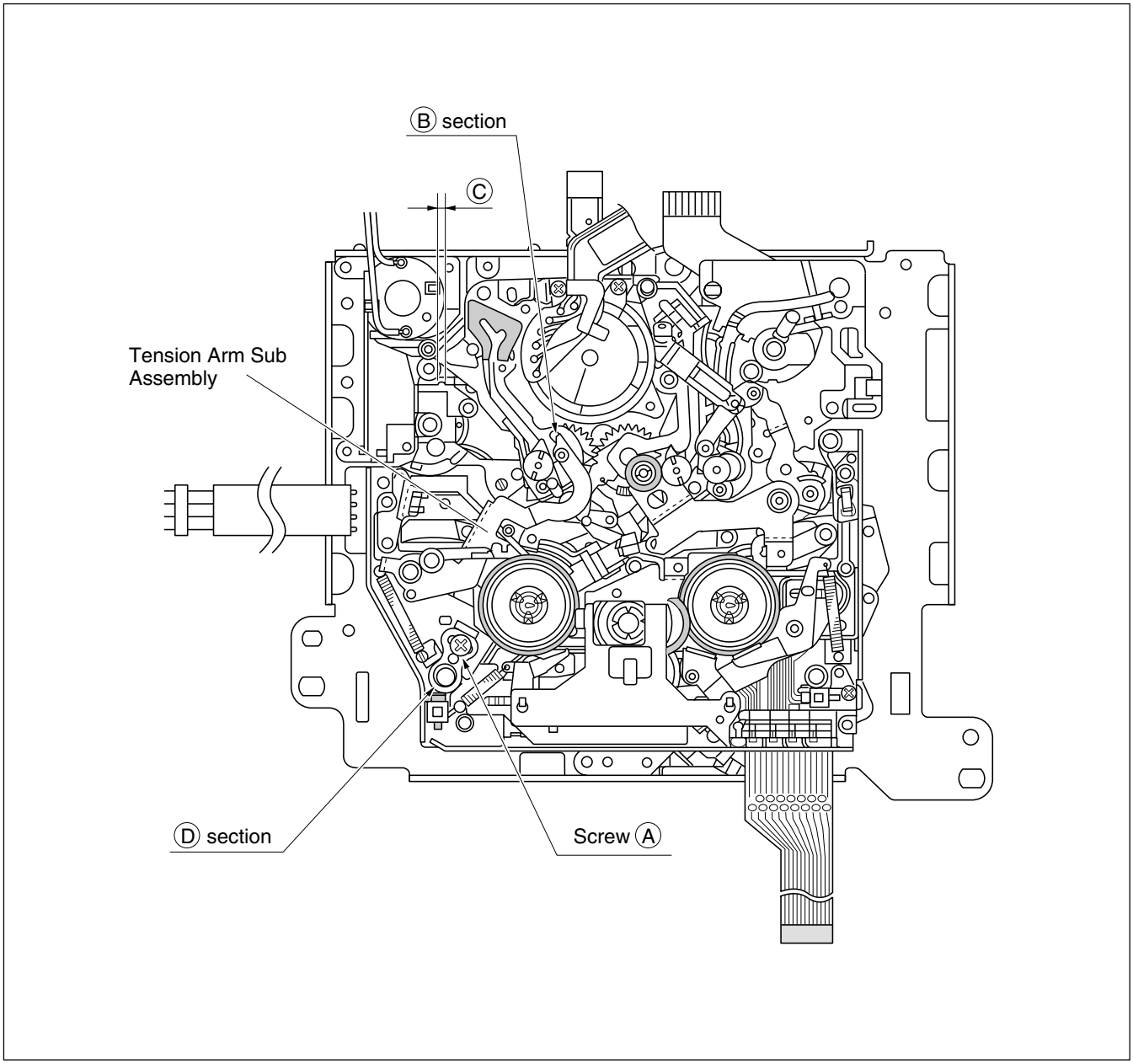



Fig. 2-17-1

**Adjustment Method**

**Note:**

***• Remove the cassette housing assembly in advance.***

1. Set the mechanism mode to the PLAY mode. (See pages 2-20 and 21.)
2. Loosen a screw Ⓐ.
3. Check the location of the tip (section Ⓑ ) of the tension arm assembly to make sure that it is within area Ⓒ . If it is located outside, turn part Ⓓ to bring it within the specified area.
4. Tighten the screw Ⓐ.

**Note :** ***Tightening torque for the screw Ⓐ : 0.06 Nm (0.6 kgfcm)***

## 2.18 COMPATIBILITY AND ERROR RATE ADJUSTMENTS

### 2.18.1 Preparation

Before disassembly and adjustment, back up the data stored in the EEPROM (IC1007 on the DV MAIN board) using the Service Support System Software (SSS software).

Table 2-18-1 shows the important service points for the compatibility and error rate adjustments.

| Adjustment Item / Service Point | Linearity Adjustment | PB Switching Point Adjustment | Error Rate Adjustmenmt |
|---|---|---|---|
| Drum replacement | Required Note 1 | Required | Required |
| Transport part replacement | Required Note 1 | Not | Check |
| Transport part (drum) repair | Required Note 1 | Not | Check |
| IC5001 (PRE/REC amp on PRE/REC MDA board) replacement | Not | Not | Check |
| IC2001 (PB. EQ on DV MAIN board) replacement | Not | Not | Required |
| DV MAIN board replacement Note 2 | Not | Required | Required |

Table 2-18-1

**Note 1 :**

- The linearity adjustment is required only after servicing or replacing the drum or the take up/supply guide rail.

**Note 2 :**

- After replacing the DV MAIN board, write the original data in the EEPROM of the new board. If write communication is not possible, mount the original EEPROM on the new board.

When adjustments of more than one item are required, use the following order for the adjustments.

**2.18.3 Linearity Adjustment**
↓
**2.18.4 PB Switching Point Adjustment**
↓
**2.18.5 Error Rate Adjustment**

### 2.18.2 Adjustment

The actual adjustment requires the following preparation.

**1. Tools required for adjustment**

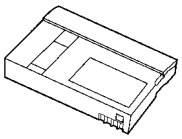
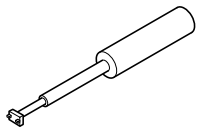
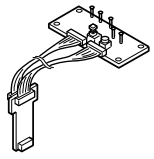
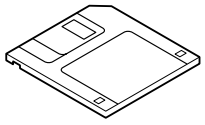
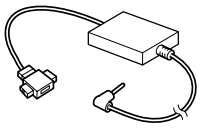
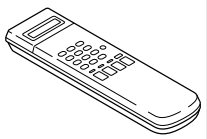
| | | |
|---|---|---|
| Alignment tape<br>US : MC-1<br>PAL : MC-2 | Guide driver<br>YTU94085 | Jig connector cable<br>PTU94018B |
|  |  |  |
| SSS software<br>PTU94016-3 | PC cable<br>US : QAM0099-002<br>PAL : QAM0099-005 | Jig RCU<br>PTU94023B |
|  |  |  |

Fig. 2-18-1

**2. Procedure**

1. Take out the 7 screws (1 to 7), then remove the top cover. (See Fig. COM1 on page 1-3 of section 1.5.)
2. Connect the jig connector cable to CN1101 on the DV MAIN board.

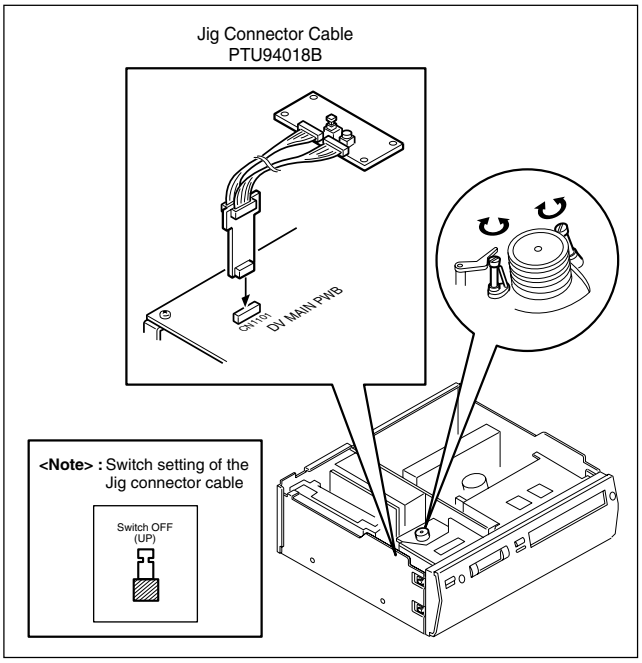



Fig. 2-18-2

3. Setup for computer adjustment

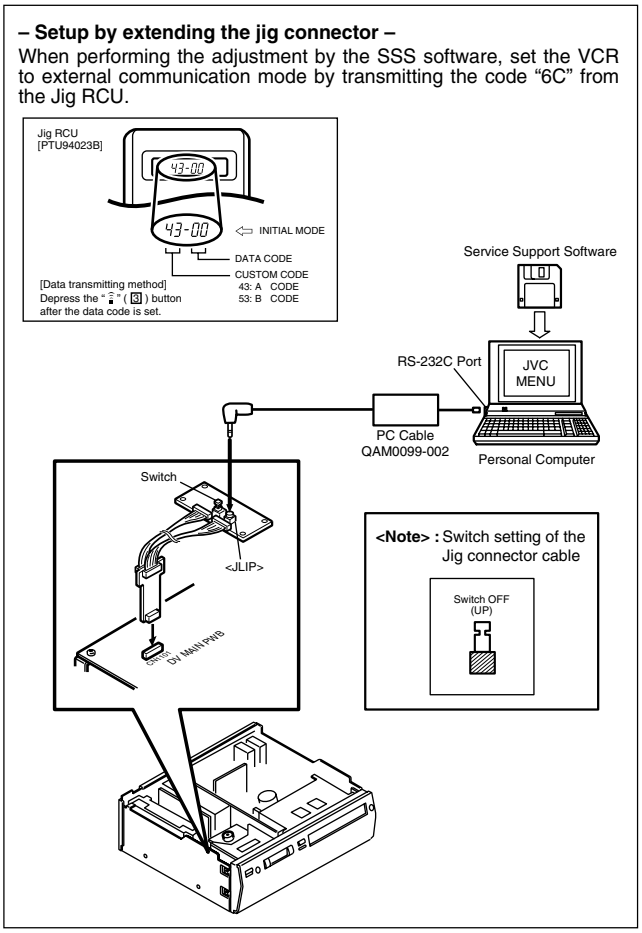
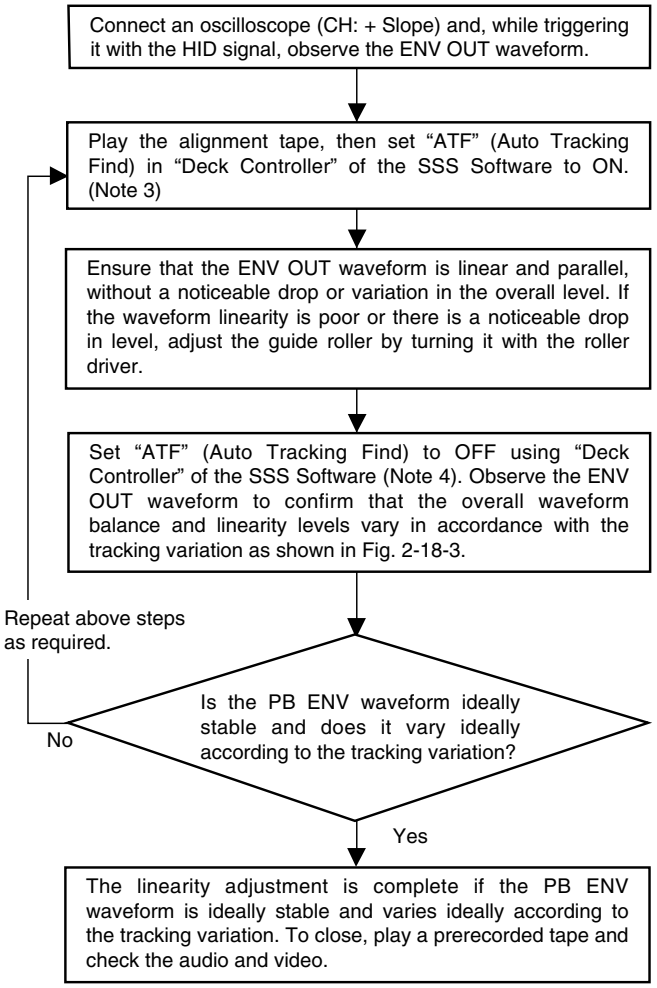

– Setup by extending the jig connector –
When performing the adjustment by the SSS software, set the VCR to external communication mode by transmitting the code “6C” from the Jig RCU.
Jig RCU [PTU94023B]
43-00
43-00
INITIAL MODE
DATA CODE
CUSTOM CODE
43: A CODE
53: B CODE
[Data transmitting method]
Depress the “ ” ( ) button after the data code is set.
Service Support Software
RS-232C Port
JVC MENU
PC Cable QAM0099-002
Personal Computer
Switch
<JLIP>
CN1101
DV MAIN PWB
<Note> : Switch setting of the Jig connector cable
Switch OFF (UP)

Fig. 2-18-3

### 2.18.3 Linearity adjustment

The following flowchart shows the linearity check/adjustment procedure.


Connect an oscilloscope (CH: + Slope) and, while triggering it with the HID signal, observe the ENV OUT waveform.
Play the alignment tape, then set “ATF” (Auto Tracking Find) in “Deck Controller” of the SSS Software to ON. (Note 3)
Ensure that the ENV OUT waveform is linear and parallel, without a noticeable drop or variation in the overall level. If the waveform linearity is poor or there is a noticeable drop in level, adjust the guide roller by turning it with the roller driver.
Set “ATF” (Auto Tracking Find) to OFF using “Deck Controller” of the SSS Software (Note 4). Observe the ENV OUT waveform to confirm that the overall waveform balance and linearity levels vary in accordance with the tracking variation as shown in Fig. 2-18-3.
Repeat above steps as required.
Is the PB ENV waveform ideally stable and does it vary ideally according to the tracking variation?
No
Yes
The linearity adjustment is complete if the PB ENV waveform is ideally stable and varies ideally according to the tracking variation. To close, play a prerecorded tape and check the audio and video.

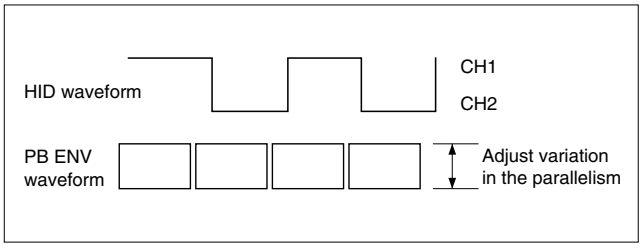



Fig. 2-18-4 PB ENV Waveform

**Note 3 :**

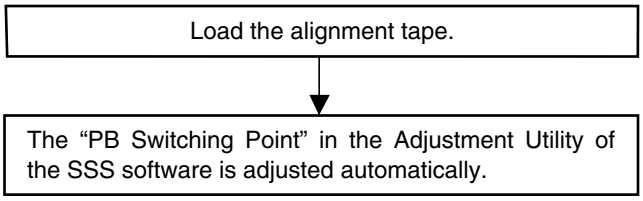
- The VHS section has an A/C head, and the first tracking position can be locked using the CTL pulse and drum FF when AT is off. Therefore, the linearity of the VHS section can usually be adjusted with AT off. However, this adjustment method is not available with the DV section, which does not have the A/C head. If ATF is turned off, the DV section performs tracking only of the speed system. Therefore, as time passes, the servo will be lost and the linearity adjustment will become difficult.

**Note 4 :**

- Since the speed servo function is active when ATF is off, there will be no problem even if the DVC ATF function is off, provided that it is for a few minutes.

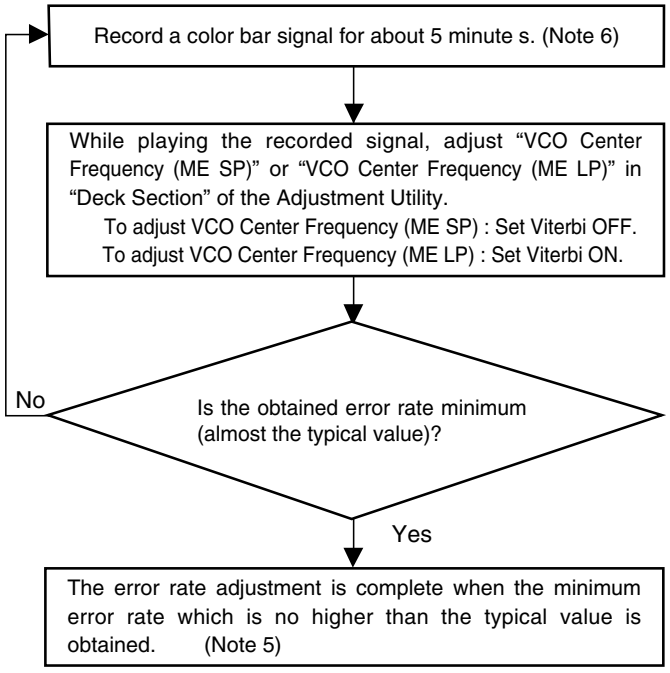
### 2.18.4 PB switching point adjustment

The following flowchart shows the PB switching point adjustment procedure.


Load the alignment tape.
The “PB Switching Point” in the Adjustment Utility of the SSS software is adjusted automatically.

### 2.18.5 Error rate adjustment

The following flowchart shows the error rate adjustment procedure.


Record a color bar signal for about 5 minute s. (Note 6)
While playing the recorded signal, adjust “VCO Center Frequency (ME SP)” or “VCO Center Frequency (ME LP)” in “Deck Section” of the Adjustment Utility.
To adjust VCO Center Frequency (ME SP) : Set Viterbi OFF.
To adjust VCO Center Frequency (ME LP) : Set Viterbi ON.
Is the obtained error rate minimum (almost the typical value)?
No
Yes
The error rate adjustment is complete when the minimum error rate which is no higher than the typical value is obtained. (Note 5)

**Note 5 :**

- The “typical value” refers to the following:
  CH1 or CH2: < 498.; with Viterbi OFF. Inter-channel difference: < 10 times between CH1 and CH2.

**Note 6 :**

- It is desirable to use a brand-new tape or an unused section of tape. This is to assure the adjustment reliability because using a damaged tape increases the error rate.

### 2.18.6 Error rate measuring method

It is not necessary to use the error rate jig (YTU93083) or a frequency counter. The Service Support System Software displays the error rates of video CH1, CH2 and totals. When measuring the error rate of a channel, be sure to total the values of the video and the audio errors.

## 2.19 TAPE EJECTION

If a loaded cassette tape cannot be ejected due to a failure in the electrical circuitry, take the cassette tape out using the following procedure.
However, this method consists of a forced driving of the loading motor. Therefore, the following description assumes that there is no trouble in the mechanism operations.

1. Unplug the power plug from the power outlet, then remove the top cover.
2. Apply 3 V DC to the electrodes (Red wire: + pole. Brown wire: - pole) on the upper part of the loading motor to perform the unloading operation so that the pole base assemblies are returned on the inner side of the tape. At this time, the exit guide arm assembly should return toward the drum assembly and the mechanism should enter the C-IN mode.
   As the tape is left without winding, be careful not to damage the tape or leave grease on it.
3. If the tape is slack, wind it up by turning the shaft on the topside of the capstan motor in the direction of the arrow using a pointed tool (chip IC replacement jig).
   This operation may be difficult because the shaft is located below the housing motor of the cassette housing assembly. Be careful not to damage parts during it.
4. After confirming that the tape is fully wound up, take out the cassette tape by turning the gear of the cassette housing assembly in the direction of the arrow.

**Note :**

- ***After ejecting the tape, check that grease or similar foreign material is not attached to the wound tape. Also perform similar checking for the mechanism assembly, particularly the tape transport system.***

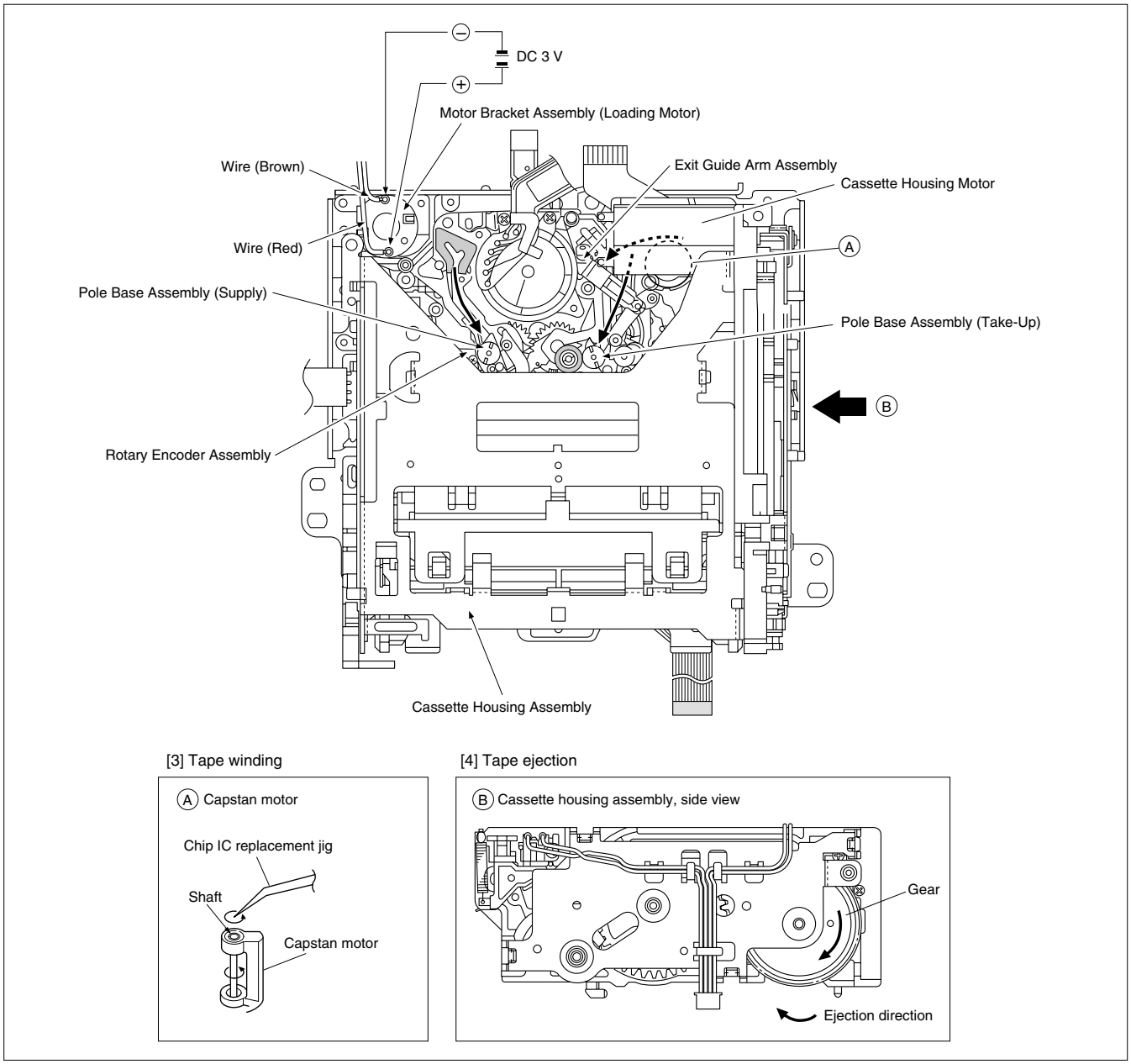



Fig. 2-19-1

# SECTION 3
# ELECTRICAL ADJUSTMENT (VHS)

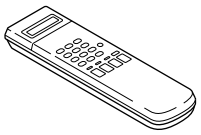
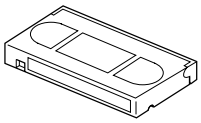
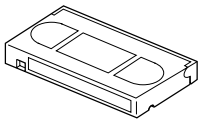
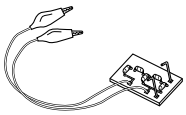
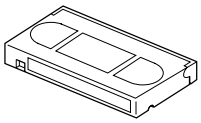
## 3.1 PRECAUTION

The following adjustment procedures are not only necessary after replacement of consumable mechanical parts or board assemblies, but are also provided as references to be referred to when servicing the electrical circuitry.
In case of trouble with the electrical circuitry, always begin a service by identifying the defective points by using the measuring instruments as described in the following electrical adjustment procedures. After this, proceed to the repair, replacement and/or adjustment. If the required measuring instruments are not available in the field, do not change the adjustment parts (variable resistor, etc.) carelessly.

### 3.1.1 Required test equipments

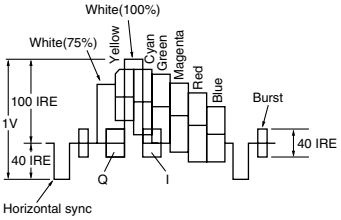
- Color (colour) television or monitor
- Oscilloscope: wide-band, dual-trace, triggered delayed sweep
- Frequency counter
- Audio level meter
- Signal generator: RF / IF sweep / marker
- Signal generator: stairstep, color (colour) bar [NTSC]
- Recording tape
- Digit-key remote controller(provided)

### 3.1.2 Required adjustment tools

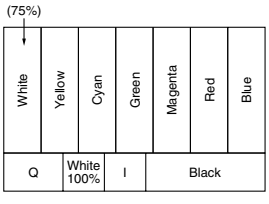
| Jig RCU<br>PTU94023B | Alignment tape<br>(SP, stairstep, NTSC)<br>MHP | Alignment tape<br>(EP, stairstep, NTSC)<br>MHP-L |
|---|---|---|
|  |  |  |
| LPF<br>PTU93006 | Alignment tape<br>(S-VHS, SP/EP, color (colour) bar)<br>MH-1H | |
|  |  | |

### 3.1.3 Color (colour) bar signal,Color (colour) bar pattern

● **Color bar signal [NTSC]**




● **Color bar pattern [NTSC]**




### 3.1.4 Switch settings and standard precautions

The SW settings of the VCR and the standard precautions for the electrical adjustments are as follows.

- ***When using the Jig RCU, set its custom code to match the custom code of the VCR.***

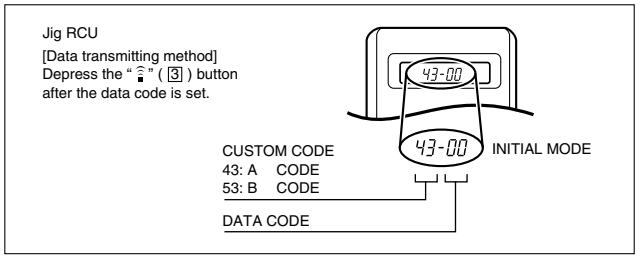



Fig. 3-1-4a Jig RCU [PTU94023B]

- ***Set the switches as shown below unless otherwise specified on the relevant adjustment chart. The switches that are not listed below can be set as desired.***
  ***If the VCR is not equipped with the functions detailed below, setup is not required.***

| | |
|---|---|
| AUTO PICTURE/VIDEO CALIBRATION/ B.E.S.T./D.S.P.C. | OFF |
| PICTURE CONTROL/SMART PICTURE | NORMAL/NATURAL |
| VIDEO STABILIZER | OFF |
| TBC | ON |
| Digital 3R | ON |
| VIDEO NAVIGATION/TAPE MANAGER | OFF |

- ***Unless otherwise specified, all measuring points and adjustment parts are located on the Main board.***
- ***In the Signal column of the adjustment chart, "Ext. S-input" means the Y/C separated video signal and "Ext. input" means the composite video signal input.***

### 3.1.5 EVR Adjustment

Some of the electrical adjustments require the adjustment performed by the EVR system. The Main board assembly have EEPROMs for storing the EVR adjustment data and user setups.

**Notes:**

- ***In the EVR adjustment mode, the value is varied with the channel buttons (+, –). The adjusted data is stored when the setting mode changes (from PB to STOP, when the tape speed is changed, etc.). Take care to identify the current mode of each adjustment item when making an adjustment.***
- ***When changing the address setting in the EVR adjustment mode, use the Jig RCU or the remote controller having numeric keypad with which a numeric code can be directly input.***
  ***The remote control code of the Jig RCU corresponds to each of the digit keys on the remote controller as follows.***

| Digit-key | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| Code | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |

- ***As the counter indication and remaining tape indication are not displayed FDP during the EVR adjustment mode, check them on the TV monitor screen.***
- ***When performing the EVR adjustment, confirm that the FDP indication is changed to the EVR mode, as shown below.***

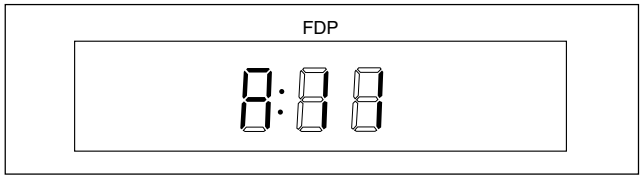



Fig. 3-1-5a EVR mode

### 3.2 SERVO CIRCUIT

#### 3.2.1 Switching point

| | | |
|---|---|---|
| Signal | (A1)<br>(A2) | • Stairstep signal<br>• Alignment tape(SP, stairstep, NTSC) [MHP] |
| Mode | (B) | • PB<br>• TBC: OFF |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D1)<br>(D2) | • VIDEO OUT terminal (75Ω terminated)<br>• TP106 (PB. FM) |
| External trigger | (E) | • TP111 (D.FF)/slope : – |
| Adjustment part | (F) | • Jig RCU: Code “51” or “52” |
| Specified value | (G) | • 8.0 ± 0.5H |
| Adjustment tool | (H) | • Jig RCU [PTU94023B] |

(1) Play back the signal (A1) of the alignment tape (A2).
(2) Apply the external trigger signal to D.FF (E) to observe the VIDEO OUT waveform and V.PB FM waveform at the measuring points (D1) and (D2).
(3) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(4) Adjust tracking by pressing the channel buttons (+, –) so that the V.PB FM waveform becomes maximum.
(5) Transmit the code (F) from the Jig RCU to adjust so that the trigger point of the VIDEO OUT waveform is changed from the trailing edge of the V.sync signal becomes the specified value (G).
(6) Set the VCR to the stop mode or eject mode.

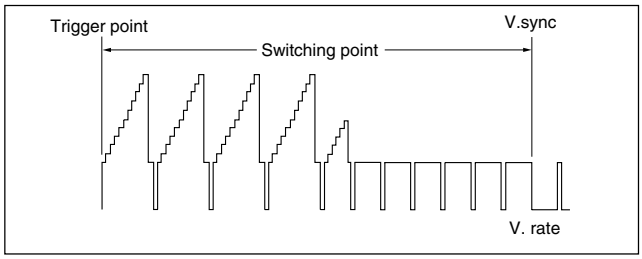



Fig. 3-2-1a Switching point

#### 3.2.2 Slow tracking preset

| | | |
|---|---|---|
| Signal | (A1)<br>(A2) | • Ext. input<br>• Color (colour) bar signal [NTSC] |
| Mode | (B1)<br>(B2) | • S-VHS SP<br>• S-VHS EP |
| Measuring point | (D) | • TV-Monitor |
| Adjustment part | (F) | • Jig RCU: Code “71“ or “72” |
| Specified value | (G) | • Minimum noise |
| Adjustment tool | (H) | • Jig RCU [PTU94023B] |

(1) Record the signal (A2) in the mode (B1), and play back the recorded signal.
(2) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(3) Set the VCR to the FWD slow mode.
(4) Transmit the code (F) from the Jig RCU to adjust so that the noise bar becomes the specified value (G) on the TV monitor in the slow mode.
(5) Set the VCR to the Stop mode.
(6) Confirm that the noise bar is (G) on the TV monitor in the slow mode.
(7) Repeat steps (3) to (6) in the REV slow mode.
(8) Repeat steps (1) to (7) in the mode (B2).

**Note:**

- ***For FWD slow (+1/6×) playback, transmit the code “08” from the Jig RCU to enter the slow playback mode, and transmit the code “D0” for REV slow (–1/6×) mode.***

### 3.3 VIDEO CIRCUIT

#### 3.3.1 D/A level

| | | |
|---|---|---|
| Signal | (A1)<br>(A2)<br>(A3) | • Ext. S-input / Ext. input<br>• Color (colour) bar signal [NTSC]<br>• S-VHS tape |
| Mode | (B) | • S-VHS<br>• EE |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • VIDEO OUT terminal (75Ω terminated) |
| Adjustment part | (F) | • VR1401 (D/A LEVEL ADJ)<br>[3D DIGITAL/4M board] |
| Specified value (Note) | (G) | • 1.00 ± 0.015 Vp-p (reference value) |

(1) Insert the cassette tape (A3) to enter the mode (B).
(2) Observe the VIDEO OUT waveform at the measuring point (D).
(3) Check the Y level value when the External S-input (Y/C separated video signal).
(4) Switch the input signal to the External input (composite video signal), and adjust the adjustment part (F) so that the Y level becomes the same value observed in step (3).

**Note:**

- ***The specified value (G) is just a reference value to be obtained when the External S-Video (Y/C separated video) signal is input. In actual adjustment, set it to the value observed in step (3).***

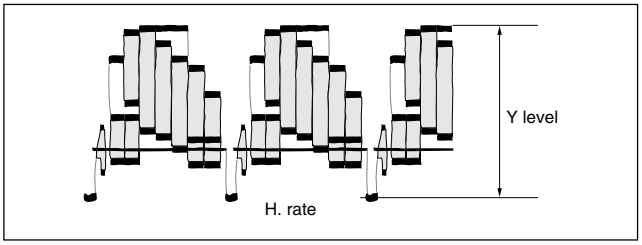



Fig. 3-3-1a D/A level

### 3.3.2 EE Y level

| | | |
|---|---|---|
| Signal | (A1)<br>(A2) | • Ext. input<br>• Color (colour) bar signal [NTSC] |
| Mode | (B) | • EE |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • Y OUT terminal (75Ω terminated) |
| EVR mode | (F1) | • Jig RCU: Code “57” |
| EVR address | (F2) | • A:11 (Press remote controller “1” key twice) |
| Specified value | (G) | • 1.00 ± 0.03 Vp-p |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Observe the Y OUT waveform at the measuring point (D).
(2) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(3) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(4) Adjust with the channel buttons (+, –) on the VCR (or on the remote controller) so that the Y level of the Y OUT waveform becomes the specified value (G).
(5) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

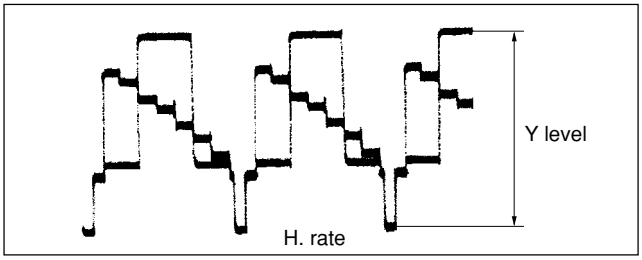



Fig. 3-3-2a EE Y level

### 3.3.3 PB Y level (S-VHS / VHS)

| | | |
|---|---|---|
| Signal | (A1)<br>(A2) | • Ext. input<br>• Color (colour) bar signal [NTSC] |
| Mode | (B1)<br>(B2) | • S-VHS SP<br>• VHS SP |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • Y OUT terminal (75Ω terminated) |
| EVR mode | (F1) | • Jig RCU: Code “57” |
| EVR address | (F2) | • A:11 (Press remote controller “1” key twice) |
| Specified value | (G) | • 1.00 ± 0.03 Vp-p |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Observe the Y OUT waveform at the measuring point (D).
(2) Record the signal (A2) in the mode (B1), and play back the recorded signal.
(3) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(4) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(5) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(6) Adjust with the channel buttons (+, –) on the VCR (or on the remote controller) so that the Y level of the Y OUT waveform becomes the specified value (G).
(7) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)
(8) Repeat steps (2) to (7) in the mode (B2).

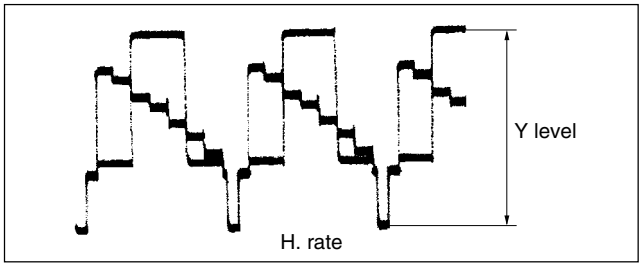



Fig. 3-3-3a PB Y level

### 3.3.4 REC color (colour) level

| | | |
|---|---|---|
| Signal | (A1)<br><br>(A2)<br>(A3) | • Alignment tape(S-VHS, SP/EP, Color(colour) bar) [MH-1H]<br>• Ext. input<br>• Color (colour) bar signal [NTSC] |
| Mode | (B1)<br>(B2) | • S-VHS SP<br>• S-VHS EP |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D1)<br>(D2) | • TP106 (PB. FM)<br>• PB color (colour) output of the LPF |
| External trigger | (E) | • TP111 (D.FF) |
| EVR mode | (F1) | • Jig RCU: Code “57” |
| EVR address | (F2) | • A:02 (Press remote controller “0” and “2” keys) |
| Specified value | (G) | • SP: “B” x 125 ± 5%<br>• EP: “B” x 125 ± 5% |
| Adjustment tool | (H1)<br>(H2)<br>(H3) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller<br>• LPF [PTU93006] (See Fig. 3-3-4a.) |

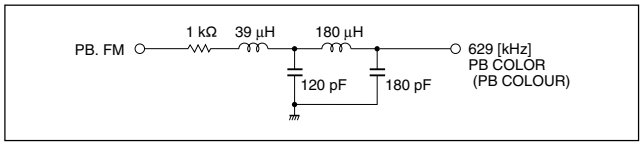



Fig. 3-3-4a LPF

(1) Connect the adjustment tool (H3) to the measuring point (D1).
(2) Apply the external trigger signal to D.FF (E) to observe the PB color (colour) waveform at the measuring point (D2).
(3) Play back the signal (A3) in the mode (B1) of the alignment tape (A1).
(4) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(5) Adjust tracking by pressing the channel buttons (+, –) so that the PB color (colour) waveform becomes maximum. Make a note of the higher PB color (colour) level as “B” at this time.
(6) Record the signal (A3) in the mode (B1), and play back the recorded signal.
(7) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(8) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(9) Adjust with the channel buttons (+, –) on the VCR (or on the remote controller) so that the higher level channel becomes the specified value (G) of the note "B" level as shown in Fig. 3-3-4b. (Adjust before recording, then confirm it by playing back.)

(10) After adjustment, record the signal (A3) then playing it back again. At this time, confirm that there is no inverting phenomenon or noise appearing on the playback screen.
(11) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)
(12) Repeat steps (3) to (11) in the mode (B2).

**Note:**

- ***After adjusting, always perform the confirmation and re-adjustment of the item 3.4.1.***

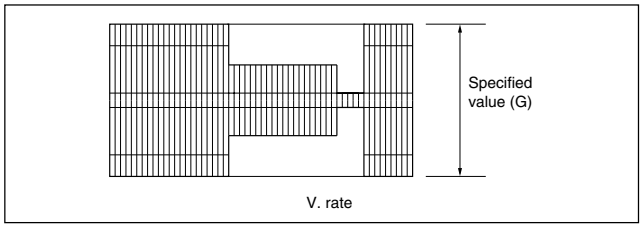



Fig. 3-3-4b REC color (colour) level

### 3.3.5 Video EQ (Frequency response)

| | | |
|---|---|---|
| Signal | (A1)<br>(A2) | • Ext. S-input<br>• Video sweep signal |
| Mode | (B1)<br>(B2)<br>(B3) | • S-VHS SP<br>• S-VHS EP<br>• Picture Control / Smart Picture<br>REC : Normal / Natural<br>PB : Edit / Distinct |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D1) | • Y OUT terminal (75Ω terminated) |
| Frequency marker | (D2) | • 3 [MHz] |
| External trigger | (E) | • TP111 (D.FF) |
| EVR mode | (F1) | • Jig RCU: Code “57” |
| EVR address | (F2) | • A:03 (Press remote controller “0” and “3” keys) |
| Specified value | (G) | • SP: 3.2 ± 0.2 div. (–2 ± 0.5 dB)<br>• EP: 2.8 ± 0.2 div. (–3 ± 0.5 dB) |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Apply the external trigger signal to D.FF (E) to observe the Y OUT waveform at the measuring point (D1).
(2) Record the signal (A2) in the mode (B1), and play back the recorded signal.
(3) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(4) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(5) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(6) Set the slope of the oscilloscope to the channel having higher (D2) marker level of the Y OUT waveform [signal (A2)]. Then set the 100 kHz marker level to the “4” scale on the oscilloscope. In this condition, adjust with the channel buttons (+, –) on the VCR (or on the remote controller) so that the (D2) marker level reaches the specified value (G).
(7) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)
(8) Repeat steps (2) to (7) in the mode (B2).

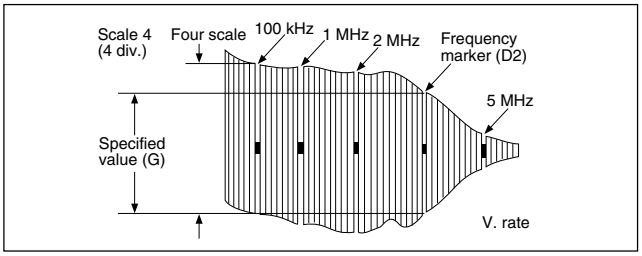



Fig. 3-3-5a Video EQ (Frequency Response)

### 3.3.6 AUTO PICTURE initial setting

| | | |
|---|---|---|
| Signal | (A1)<br>(A2)<br>(A3) | • Ext. input<br>• Video: Optional<br>• VHS tape |
| Mode | (B) | • EE → Auto adjust (SP/EP REC → PB) |
| Adjustment part | (F) | • Jig RCU : Code “58” |
| Specified value | (G) | • STOP mode |
| Adjustment tool | (H) | • Jig RCU [PTU94023B] |

(1) Insert the cassette tape (A3).
(2) Set the VCR to the Auto adjust mode by transmitting the code (F) from the Jig RCU. When the VCR enters the stop mode, the adjustment is completed. When the VCR enters the eject mode, repeat steps (1) to (2) again.

### 3.3.7 DV EE Y level

| | | |
|---|---|---|
| Signal | (A1)<br>(A2) | • Ext. input<br>• Color (colour) bar signal [NTSC] |
| Mode | (B) | • VHS<br>• EE |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • TP701 (DV AGC) |
| Adjustment part | (F) | • VR701 (DV AGC) |
| Specified value | (G) | • 1.00 ± 0.02 Vp-p |

(1) Observe the VIDEO OUT waveform at the measuring point (D).
(2) Adjust the adjustment part (F) so that the Y level of the VIDEO OUT waveform becomes the specified value (G).

**Note:**

- ***After adjusting, always perform the confirmation and re-adjustment of the Electrical adjustment (DV).***

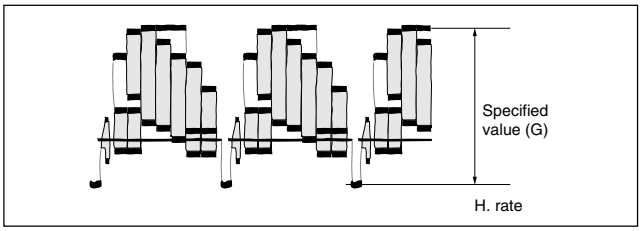



Fig. 3-3-7a DV EE Y level

### 3.4 AUDIO CIRCUIT

**Notes:**

- ***This adjustment should be done after the "REC color (colour) level adjustment" for the video circuit has been completed.***
- ***GND (Ground) should be taken from the Tuner shield case.***

#### 3.4.1 Audio REC FM

| | | |
|---|---|---|
| Signal | (A1)<br>(A2)<br>(A3) | • Ext. input<br>• Audio: No signal<br>• Video: Color (colour) bar signal [NTSC] |
| Mode | (B) | • S-VHS EP |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • TP2253 (A. FM) |
| External trigger | (E) | • TP111 (D.FF) |
| EVR mode | (F1) | • Jig RCU: Code "57" |
| EVR address | (F2) | • A: 30 (Press remote controller "3" and "0" keys.) |
| Specified value | (G1)<br>(G2) | • 500 ± 100 mVp-p<br>• More than 350 mVp-p |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Apply the external trigger signal to D.FF (E) to observe the Audio PB FM waveform at the measuring point (D).
(2) Record the signal (A3) with no audio signal input in the mode (B), and play back the recorded signal.
(3) Press the channel buttons (+, –) simultaneously to enter the manual tracking mode. This also brings tracking to the center (centre).
(4) If the A.PB FM level is not within the specified value (G1), perform the adjustment in a following procedure.
(5) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(6) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(7) Adjust with the channel buttons (+, –) on the VCR (or on the remote controller) so that the A.PB FM level of the higher channel level becomes the specified value (G1). (Adjust before recording, then confirm it by playing back.)
(8) If the specified value (G1) is not obtained, adjust with the channel buttons (+, –) so that the waveform level of the lower channel level becomes the specified value (G2). (Adjust before recording, then confirm it by playing back.)
(9) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

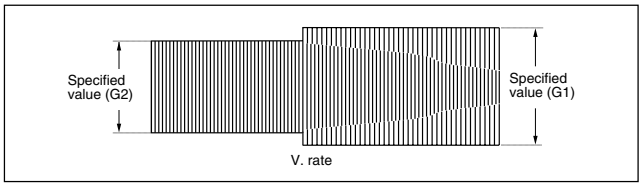



Fig. 3-4-1a Audio REC FM

### 3.5 DEMODULATOR CIRCUIT

**Notes:**

- ***Unless otherwise specified in this demod circuit adjustments, all measuring points and adjustment parts are located on the Demod board.***
- ***Unless otherwise specified,set an audio multiplex TV signal generator as follows;***
  ***RF signal : 70 dBμ / 75Ω, color bar 87.5% modulation.***

#### 3.5.1 Input level

| | | |
|---|---|---|
| Signal | (A) | • RF signal (Audio: mono 300 Hz) |
| Mode | (B) | • Tuner<br>• EE |
| Equipment | (C) | • Audio level meter |
| Measuring point | (D) | • IC1501 pin 26 |
| EVR mode | (F1) | • Jig RCU : Code "57" |
| EVR address | (F2) | • A : 20 (Press remote controller "2" and "0" keys.) |
| Specified value | (G) | • 500 ± 10 mVrms |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Set an audio signal mode of the RF signal generator to mono 300 Hz.
(2) Connect the equipment (C) to the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(5) Adjust with the channel buttons (+,–) on the VCR (or on the remote controller) so that the level of the measuring point (D) becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

#### 3.5.2 Stereo VCO

| | | |
|---|---|---|
| Signal | (A) | • No signal |
| Mode | (B) | • Tuner<br>• EE |
| Equipment | (C) | • Frequency counter |
| Measuring point | (D1) | • IC1501 pin 26 |
| Short point | (D2) | • C1505(–) terminal |
| EVR mode | (F1) | • Jig RCU : Code "57" |
| EVR address | (F2) | • A : 21 (Press remote controller "2" and "1" keys.) |
| Specified value | (G) | • 15.73 ± 0.1 kHz |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Connect the short wire between the short point (D2) and the GND (Ground).
(2) Connect the equipment (C) to the measuring point (D1).

(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(5) Adjust with the channel buttons (+,–) on the VCR (or on the remote controller) so that the frequency of the measuring point (D1) becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)
(7) Disconnect the short wire between the short point (D2) and the GND (Ground).

### 3.5.3 Stereo filter

| | | |
|---|---|---|
| Signal | (A) | • RF signal (Audio: No signal) |
| Mode | (B) | • Tuner<br>• EE |
| Equipment | (C) | • Oscilloscope |
| Measuring point | (D) | • IC1501 pin 26 |
| EVR mode | (F1) | • Jig RCU : Code “57” |
| EVR address | (F2) | • A : 22 (Press remote controller “2” key twice.) |
| Specified value | (G) | • Minimum level |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Set an audio signal mode of the RF signal generator to no signal.
(2) Connect the equipment (C) to the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(5) Adjust with the channel buttons (+,–) on the VCR (or on the remote controller) so that the level of the measuring point (D) becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

### 3.5.4 Separation - 1

| | | |
|---|---|---|
| Signal | (A) | • RF signal<br>(Audio: L-ch 300 Hz 14% modulated) |
| Mode | (B) | • Tuner<br>• EE |
| Equipment | (C) | • Audio level meter |
| Measuring point | (D) | • IC1501 pin 26 |
| EVR mode | (F1) | • Jig RCU : Code “57” |
| EVR address | (F2) | • A : 23 (Press remote controller “2” and “3” keys.) |
| Specified value | (G) | • Minimum level |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Set an audio signal mode of the RF signal generator to alternate L-ch 300 Hz 14% modulated.
(2) Connect the equipment (C) to the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(5) Adjust with the channel buttons (+,–) on the VCR (or on the remote controller) so that the level of the measuring point (D) becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

### 3.5.5 Separation - 2

| | | |
|---|---|---|
| Signal | (A) | • RF signal<br>(Audio: L-ch 5 kHz 14% modulated) |
| Mode | (B) | • Tuner |
| | | • EE |
| Equipment | (C) | • Audio level meter |
| Measuring point | (D) | • IC1501 pin 26 |
| EVR mode | (F1) | • Jig RCU : Code “57” |
| EVR address | (F2) | • A : 24 (Press remote controller “2” and “4” keys.) |
| Specified value | (G) | • Minimum level |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Set an audio signal mode of the RF signal generator to alternate L-ch 5 kHz 14% modulated.
(2) Connect the equipment (C) to the measuring point (D).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(5) Adjust with the channel buttons (+,–) on the VCR (or on the remote controller) so that the level of the measuring point(D) becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)

### 3.5.6 SAP VCO

| | | |
|---|---|---|
| Signal | (A) | • No. signal |
| Mode | (B) | • Tuner<br>• EE |
| Equipment | (C) | • Frequency counter |
| Measuring point | (D1) | • IC1501 pin 26 |
| Short point | (D2) | • C1505 (–) terminal |
| EVR mode | (F1) | • Jig RCU : Code “57” |
| EVR address | (F2) | • A : 25 (Press remote controller “2” and “5” keys.) |
| Specified value | (G) | • 78.67 ± 0.5 kHz |
| Adjustment tool | (H) | • Jig RCU [PTU94023B]<br>• Digit-key remote controller |

(1) Connect the short wire between the short point (D2) and the GND (Ground).
(2) Connect the equipment (C) to the measuring point (D1).
(3) Set the VCR to the EVR mode by transmitting the code (F1) from the Jig RCU.
(4) Set the EVR address to (F2) by pressing the button of the digit-key remote controller.
(5) Adjust with the channel buttons (+,–) on the VCR (or on the remote controller) so that the frequency of the measuring point (D1) becomes the specified value (G).
(6) Release the EVR mode of the VCR by transmitting the code (F1) from the Jig RCU again. (When the EVR mode is released, the adjusted data is memorized.)
(7) Disconnect the short wire between the short point (D2) and the GND (Ground).

# ELECTRICAL ADJUSTMENT (DV)

## 3.6 PREPARATION

### 3.6.1 Precautions

(1) The DV section of this model is based on a special adjustment method using a PC. However, ordinary adjustment is required only when the part listed below has been replaced. In this case, the adjustment should be performed by a service center equipped with the required facilities.

**• $E^2$ PROM (IC1007 on DV main board)**

In case of trouble with the electrical circuitry, First identify the faulty position with a measuring tool as described below. Proceed to repair, replacement and/or adjustment only after the troubleshooting.

(2) When observing a chip TP, use an IC clip or similar tool to protect the chip against stress. When replacing a chip part (IC, particularly), remove solder completely before replacing. (This is to prevent separation of the pattern.)

(3) The connectors are fragile. Be careful when plugging or unplugging a wire.

### 3.6.2 Equipment required for adjustment

① Personal computer (Windows compatible)
② Color monitor
③ Oscilloscope (2-CH, 100 MHz or more)
④ Frequency counter

### 3.6.3 Tools required for adjustments

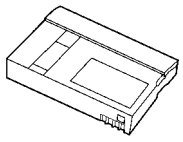
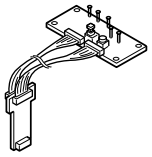
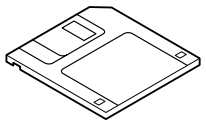
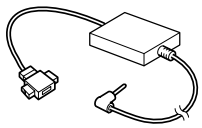
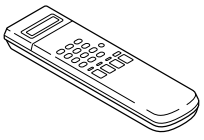
| | | |
|---|---|---|
| Alignment tape<br>US : MC-1<br>PAL : MC-2 | Jig connector cable<br>PTU94018B | SSS software<br>PTU94016-3 |
|  |  |  |
| PC cable<br>US : QAM0099-002<br>PAL : QAM0099-005 | Jig RCU<br>PTU94023B | |
|  |  | |

Fig. 3-6-3a

### 3.6.4 Setup

1. Setup for computer adjustment

**— Setup by extending the jig connector —**

When performing the adjustment by the Service Support Software, set the VCR to external communication mode by transmitting the code "6C" from the Jig RCU.

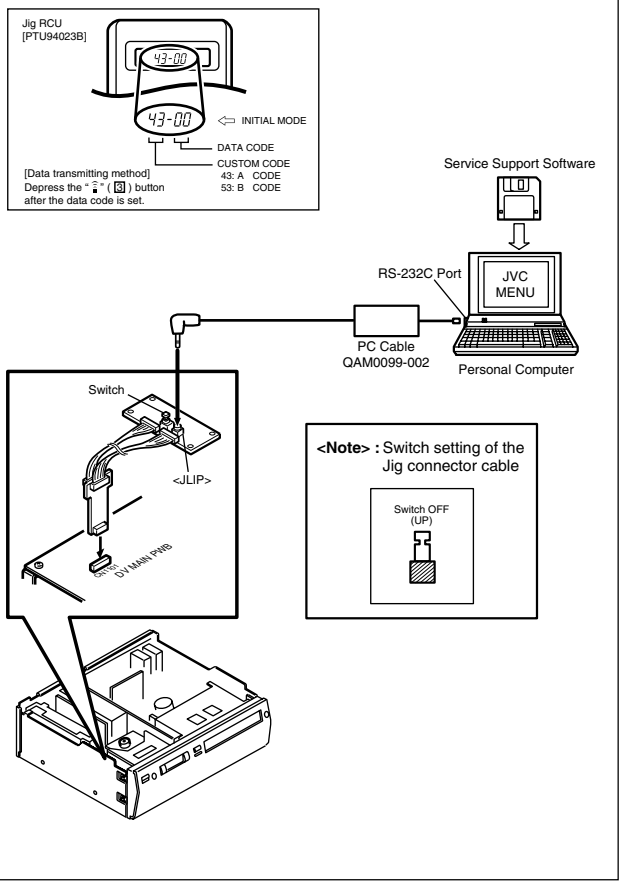



Fig. 3-6-4a Setup for Computer Adjustment

# SECTION 4
# CHARTS AND DIAGRAMS

## NOTES OF SCHEMATIC DIAGRAM

**Safety precautions**
**The Components identified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.**

### 1. Units of components on the schematic diagram

Unless otherwise specified.

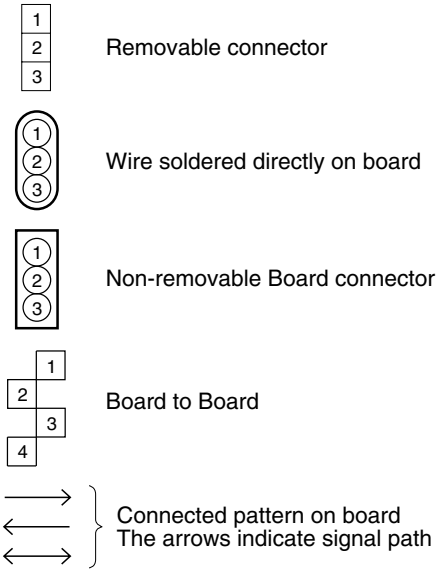
1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K or k: kΩ (1000Ω), M: MΩ (1000kΩ)
2) All capacitance values are in μF, (P: PF).
3) All inductance values are in μH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

### 2. Indications of control voltage

AUX : Active at high

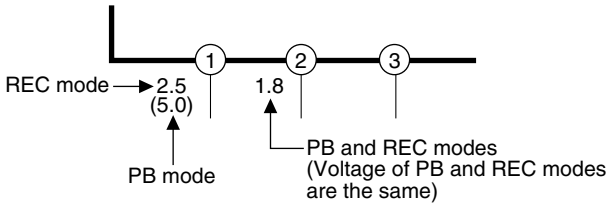
$\overline{\text{AUX}}$ or AUX(L) : Active at low

### 3. Interpreting Connector indications




### 4. Voltage measurement

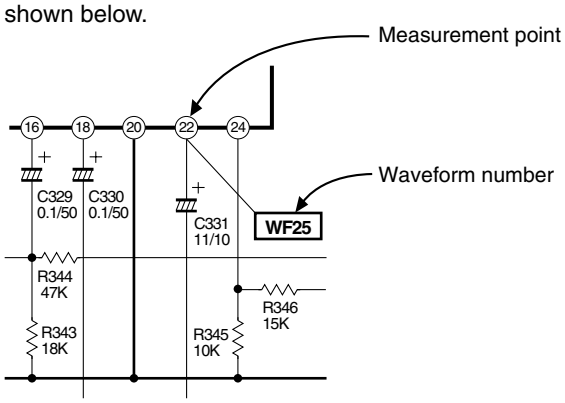
1) Video circuits
   REC : Colour bar signal in SP mode, normal VHS mode
   PB : Alignment tape, colour bar SP mode, normal VHS mode
   — : Unmeasurable or unnecessary to measure
2) Audio circuits
   REC : 1KHz, –8 dBs sine wave signal in SP mode, Normal VHS mode
   PB : REC then playback it
3) Movie Camera circuits
   Measured using a correctly illuminated gray scale or colour bar test charts in the E-E mode
4) Indication on schematic diagram
   Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



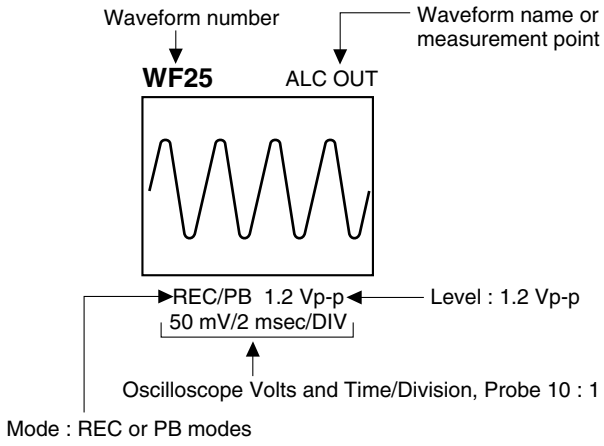

**Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.**

### 5. Waveform measurement

1) Video circuits
   REC : Colour bar signal in SP mode, normal VHS mode
   PB : Alignment tape, colour bar SP mode, normal VHS mode
2) Audio circuits
   REC : 1KHz, –8 dBs sine wave signal in SP mode, normal VHS mode
   PB : REC then playback it
3) Movie Camera circuits
   Measured using a correctly illuminated gray scale or colour bar test chatrs in the E-E mode
4) Indication on schematic diagram
   Waveform indications on the schematic diagram are as shown below.




5) Waveform indications



### 6. Signal path Symbols

The arrows indicate the signal path as follows.

Playback signal path

Playback and recording signal path

Recording signal path
(including E-E signal path)

Capstan servo path

Drum servo path

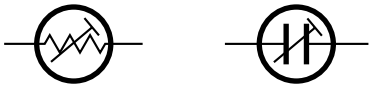
(Example)

R-Y Playback R-Y signal path

Y Recording Y signal path

### 7. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



### 8. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.

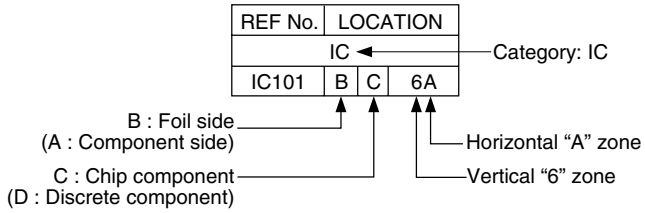
## CIRCUIT BOARD NOTES

### 1. Foil and Component sides

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

### 2. Parts location guides

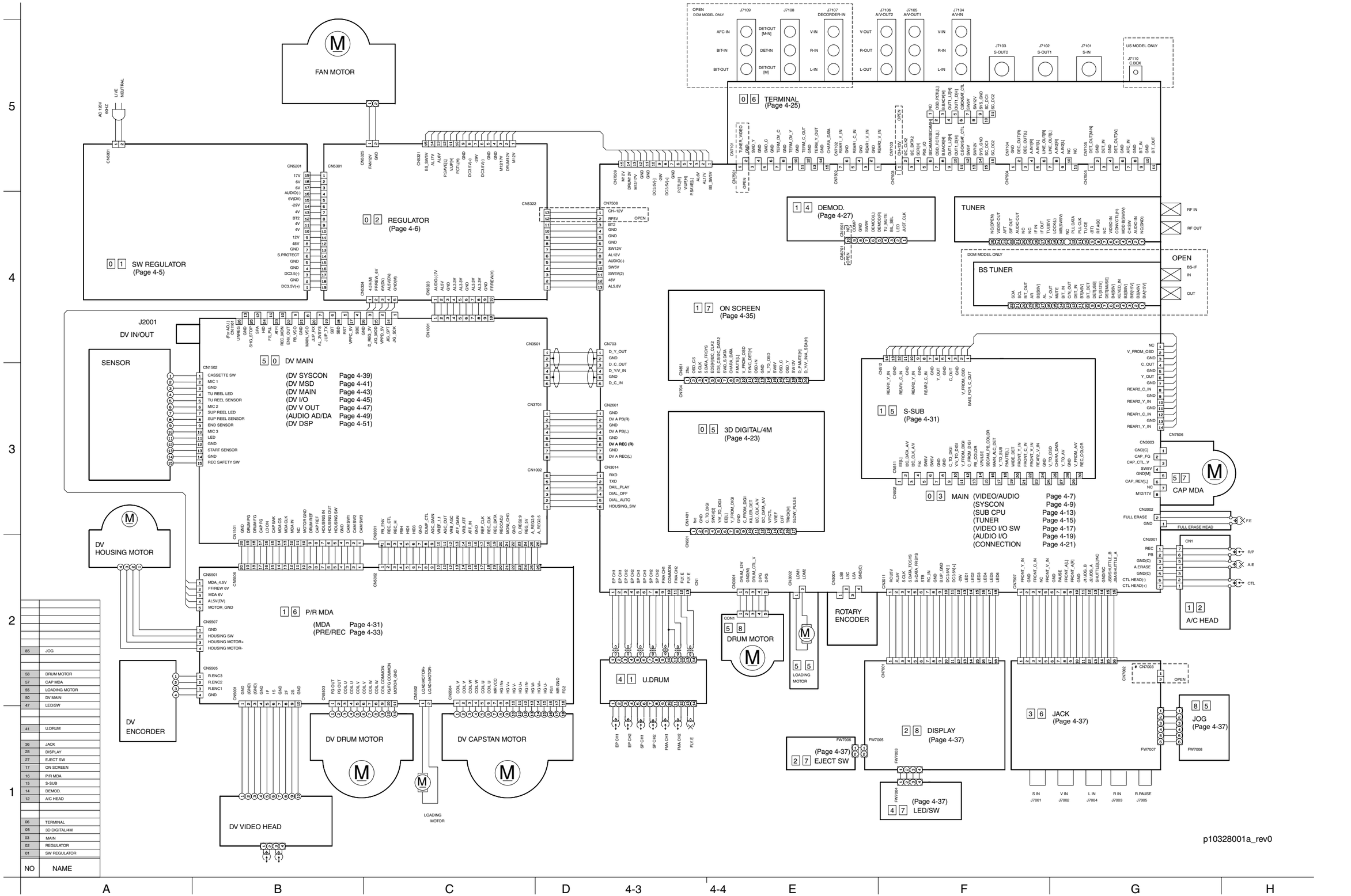
Parts location are indicated by guide scale on the circuit board.




**Note:**

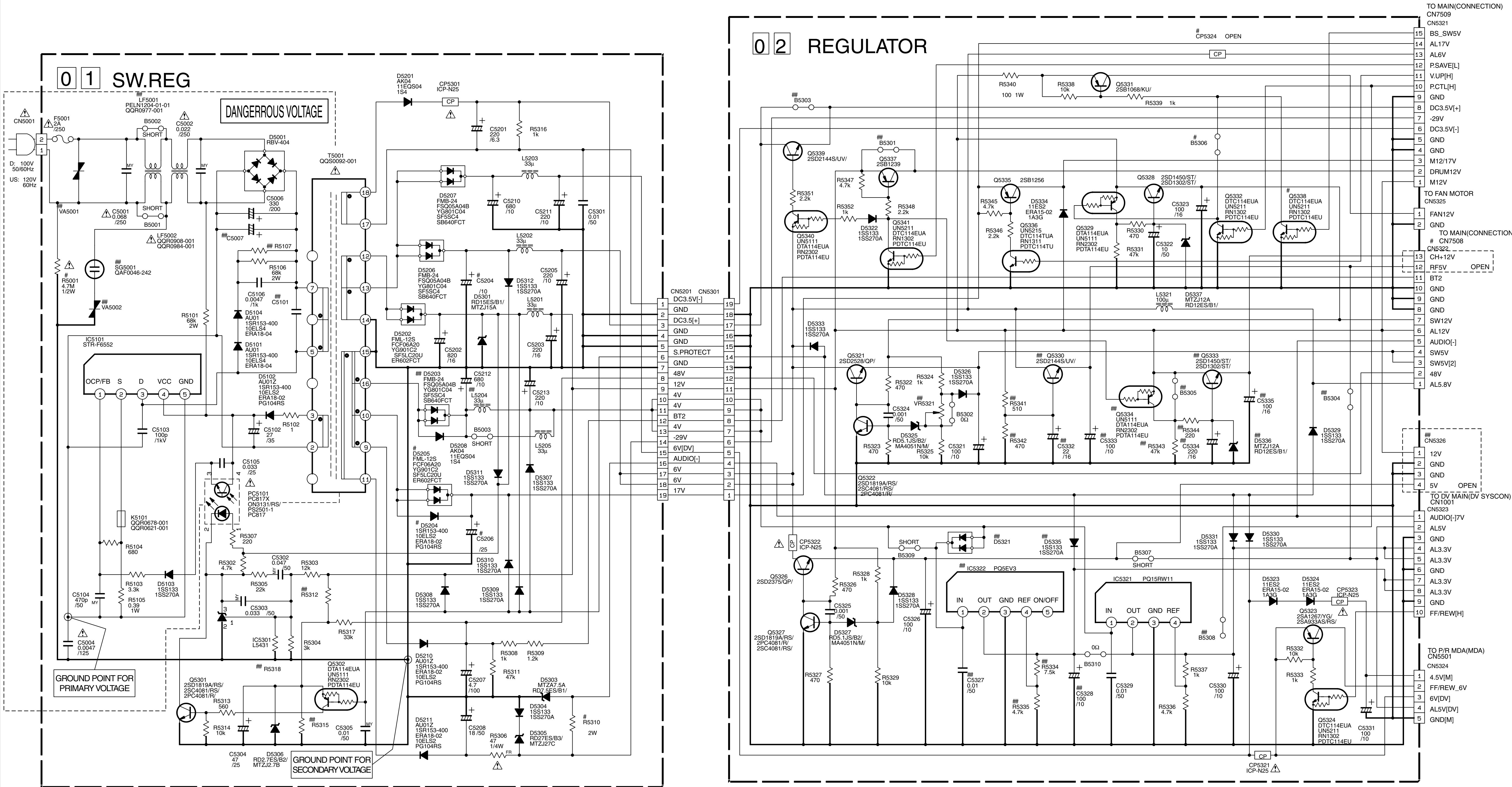
**For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).**

## 4.1 BOARD INTERCONNECTIONS




| NO | NAME |
|---|---|
| 85 | JOG |
| 58 | DRUM MOTOR |
| 57 | CAP MDA |
| 55 | LOADING MOTOR |
| 50 | DV MAIN |
| 47 | LED/SW |
| 41 | U.DRUM |
| 36 | JACK |
| 28 | DISPLAY |
| 27 | EJECT SW |
| 17 | ON SCREEN |
| 16 | P/R MDA |
| 15 | S-SUB |
| 14 | DEMOD. |
| 12 | A/C HEAD |
| 06 | TERMINAL |
| 05 | 3D DIGITAL/4M |
| 03 | MAIN |
| 02 | REGULATOR |
| 01 | SW REGULATOR |

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



01 SW.REG
DANGERROUS VOLTAGE
CN5001
F5001 2A /250
LF5001 PELN1204-01-01 QQR0977-001
B5002 SHORT
C5002 0.022 /250
B5001 SHORT
C5001 0.068 /250
D: 100V 50/60Hz
US: 120V 60Hz
VA5001
LF5002 QQR0908-001 QQR0984-001
D5001 RBV-404
C5006 330 /200
C5007
T5001 QQS0092-001
R5001 4.7M 1/2W
SG5001 QAF0046-242
VA5002
R5107
R5106 68k 2W
C5106 0.0047 /1k
C5101
D5104 AU01 1SR153-400 10ELS4 ERA18-04
D5101 AU01 1SR153-400 10ELS4 ERA18-04
D5102 AU01Z 1SR153-400 10ELS2 ERA18-02 PG104RS
R5101 68k 2W
IC5101 STR-F6552
OCP/FB S D VCC GND
C5103 100p /1kV
C5102 27 /35
R5102 1
C5105 0.033 /25
PC5101 PC817X ON3131/RS/ PS2501-1 PC817
K5101 QQR0678-001 QQR0621-001
R5104 680
R5103 3.3k
R5105 0.39 1W
D5103 1SS133 1SS270A
C5104 470p /50
C5004 0.0047 /125
GROUND POINT FOR PRIMARY VOLTAGE
R5307 220
R5302 4.7k
C5302 0.047 /50
R5303 12k
R5305 22k
R5312
C5303 0.033 /50
IC5301 L5431
R5304 3k
R5317 33k
R5318
Q5301 2SD1819A/RS/ 2SC4081/RS/ 2PC4081/R/
R5313 560
R5314 10k
C5304 47 /25
D5306 RD2.7ES/B2/ MTZJ2.7B
R5315
Q5302 DTA114EUA UN5111 RN2302 PDTA114EU
C5305 0.01 /50
GROUND POINT FOR SECONDARY VOLTAGE
D5201 AK04 11EQS04 1S4
CP5301 ICP-N25
C5201 220 /6.3
R5316 1k
L5203 33µ
D5207 FMB-24 FSQ05A04B YG801C04 SF5SC4 SB640FCT
C5210 680 /10
C5211 220 /10
C5301 0.01 /50
L5202 33µ
D5206 FMB-24 FSQ05A04B YG801C04 SF5SC4 SB640FCT
C5204 /10
D5301 RD15ES/B1/ MTZJ15A
D5312 1SS133 1SS270A
C5205 220 /10
L5201 33µ
D5202 FML-12S FCF06A20 YG901C2 SF5LC20U ER602FCT
C5202 820 /16
C5203 220 /16
D5203 FMB-24 FSQ05A04B YG801C04 SF5SC4 SB640FCT
C5212 680 /10
L5204 33µ
C5213 220 /10
B5003 SHORT
L5205 33µ
D5205 FML-12S FCF06A20 YG901C2 SF5LC20U ER602FCT
D5208 AK04 11EQS04 1S4
D5311 1SS133 1SS270A
D5307 1SS133 1SS270A
D5204 1SR153-400 10ELS2 ERA18-02 PG104RS
C5206 /25
D5310 1SS133 1SS270A
D5308 1SS133 1SS270A
D5309 1SS133 1SS270A
D5210 AU01Z 1SR153-400 ERA18-02 10ELS2 PG104RS
C5207 4.7 /100
R5308 1k
R5309 1.2k
R5311 47k
D5303 MTZA7.5A RD7.5ES/B1/
D5304 1SS133 1SS270A
D5305 RD27ES/B3/ MTZJ27C
R5310 2W
D5211 AU01Z 1SR153-400 ERA18-02 10ELS2 PG104RS
C5208 18 /50
R5306 47 1/4W
CN5201 CN5301
1 DC3.5V[-] 19
2 GND 18
3 DC3.5[+] 17
4 GND 16
5 GND 15
6 S.PROTECT 14
7 GND 13
8 48V 12
9 12V 11
10 4V 10
11 4V 9
12 BT2 8
13 4V 7
14 -29V 6
15 6V[DV] 5
16 AUDIO[-] 4
17 6V 3
18 6V 2
19 17V 1
02 REGULATOR
CP5324 OPEN
R5340 100 1W
R5338 10k
Q5331 2SB1068/KU/
R5339 1k
B5303
Q5339 2SD2144S/UV/
B5301
Q5337 2SB1239
R5347 4.7k
R5351 2.2k
R5352 1k
R5348 2.2k
Q5340 UN5111 DTA114EUA RN2302 PDTA114EU
D5322 1SS133 1SS270A
Q5341 UN5211 DTC114EUA RN1302 PDTC114EU
Q5335 2SB1256
R5345 4.7k
R5346 2.2k
D5334 11ES2 ERA15-02 1A3G
Q5336 UN5215 DTC114TUA RN1311 PDTC114TU
Q5329 DTA114EUA UN5111 RN2302 PDTA114EU
Q5328 2SD1450/ST/ 2SD1302/ST/
R5330 470
R5331 47k
C5322 10 /50
C5323 100 /16
B5306
Q5332 DTC114EUA UN5211 RN1302 PDTC114EU
Q5338 DTC114EUA UN5211 RN1302 PDTC114EU
L5321 100µ
D5337 MTZJ12A RD12ES/B1/
D5333 1SS133 1SS270A
Q5321 2SD2528/QP/
R5322 470
R5324 1k
D5326 1SS133 1SS270A
VR5321
B5302 0Ω
C5324 0.001 /50
D5325 RD5.1JS/B2/ MA4051N/M/
R5323 470
R5325 10k
C5321 100 /10
R5341 510
R5342 470
C5332 22 /16
Q5330 2SD2144S/UV/
C5333 100 /10
Q5334 UN5111 DTA114EUA RN2302 PDTA114EU
R5343 47k
Q5333 2SD1450/ST/ 2SD1302/ST/
B5305
R5344 220
C5334 220 /16
C5335 100 /16
D5336 MTZJ12A RD12ES/B1/
B5304
D5329 1SS133 1SS270A
Q5322 2SD1819A/RS/ 2SC4081/RS/ 2PC4081/R/
CP5322 ICP-N25
Q5326 2SD2375/QP/
B5309 SHORT
D5321
D5335 1SS133 1SS270A
R5328 1k
R5326 470
C5325 0.001 /50
D5328 1SS133 1SS270A
Q5327 2SD1819A/RS/ 2PC4081/R/ 2SC4081/RS/
D5327 RD5.1JS/B2/ MA4051N/M/
C5326 100 /10
IC5322 PQ5EV3
IN OUT GND REF ON/OFF
R5327 470
R5329 10k
C5327 0.01 /50
R5334 7.5k
R5335 4.7k
C5328 100 /10
B5310 0Ω
B5307 SHORT
IC5321 PQ15RW11
IN OUT GND REF
C5329 0.01 /50
B5308
R5336 4.7k
R5337 1k
C5330 100 /10
D5331 1SS133 1SS270A
D5330 1SS133 1SS270A
D5323 11ES2 ERA15-02 1A3G
D5324 11ES2 ERA15-02 1A3G
CP5323 ICP-N25
Q5323 2SA1267/YG/ 2SA933AS/RS/
R5332 10k
R5333 1k
Q5324 DTC114EUA UN5211 RN1302 PDTC114EU
C5331 100 /10
CP5321 ICP-N25
TO MAIN(CONNECTION) CN7509
CN5321
15 BS_SW5V
14 AL17V
13 AL6V
12 P.SAVE[L]
11 V.UP[H]
10 P.CTL[H]
9 GND
8 DC3.5V[+]
7 -29V
6 DC3.5V[-]
5 GND
4 GND
3 M12/17V
2 DRUM12V
1 M12V
TO FAN MOTOR CN5325
1 FAN12V
2 GND
TO MAIN(CONNECTION) # CN7508
CN5322
13 CH+12V
12 RF5V OPEN
11 BT2
10 GND
9 GND
8 GND
7 SW12V
6 AL12V
5 AUDIO[-]
4 SW5V
3 SW5V[2]
2 48V
1 AL5.8V
CN5326
1 12V
2 GND
3 GND
4 5V OPEN
TO DV MAIN(DV SYSCON) CN1001
CN5323
1 AUDIO[-]7V
2 AL5V
3 GND
4 AL3.3V
5 AL3.3V
6 GND
7 AL3.3V
8 AL3.3V
9 GND
10 FF/REW[H]
TO P/R MDA(MDA) CN5501
CN5324
1 4.5V[M]
2 FF/REW_6V
3 6V[DV]
4 AL5V[DV]
5 GND[M]


## MARK ELEMENTS ARE NOT MOUNTED

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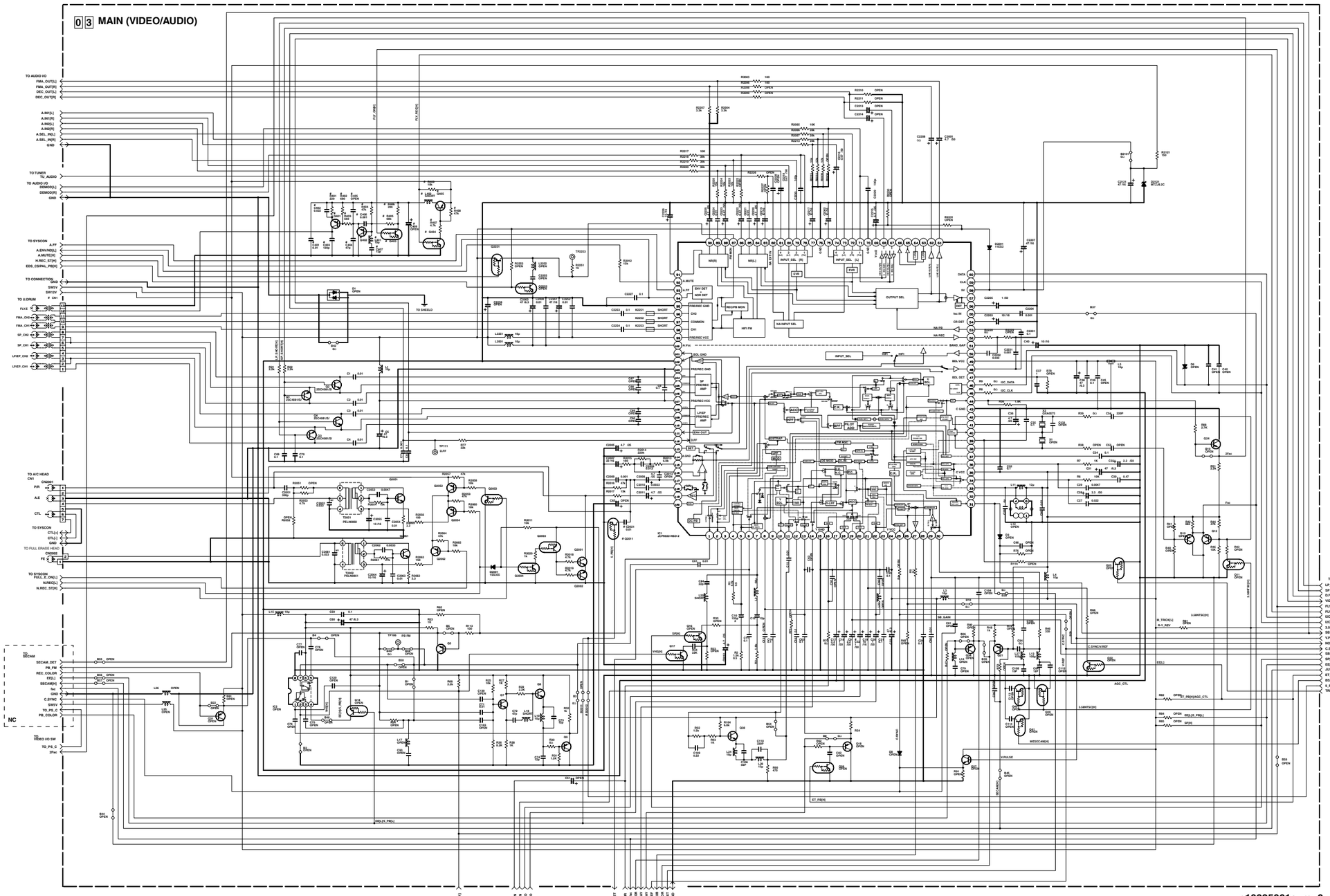
# DIFFERENCE TABLE

| | D5204 | D5205 | R5001 | R5310 | C5204 | C5206 | Q5338 | CP5324 | B5306 |
|---|---|---|---|---|---|---|---|---|---|
| DOM | NO | YES | NO | 680 | 2700 | 330 | YES | YES | NO |
| US | YES | NO | YES | 820 | 2200 | 180 | NO | NO | YES |

## 4.3 VIDEO / AUDIO SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*




**# DIFFERENCE TABLE** ○ Used × Not used

| SYMBOL / MODEL | Q401-Q405 L401,L402 R401-R409 C401-C407,C409 | CN1 |
|---|---|---|
| W/ FE HEAD | ○ | 1- 13 |
| W/O FE HEAD | × | 1- 11 |

| SYMBOL / MODEL | Q2011 C2021 B2012 |
|---|---|
| W/ XS_PB | ○ |
| W/O XS_PB | × |

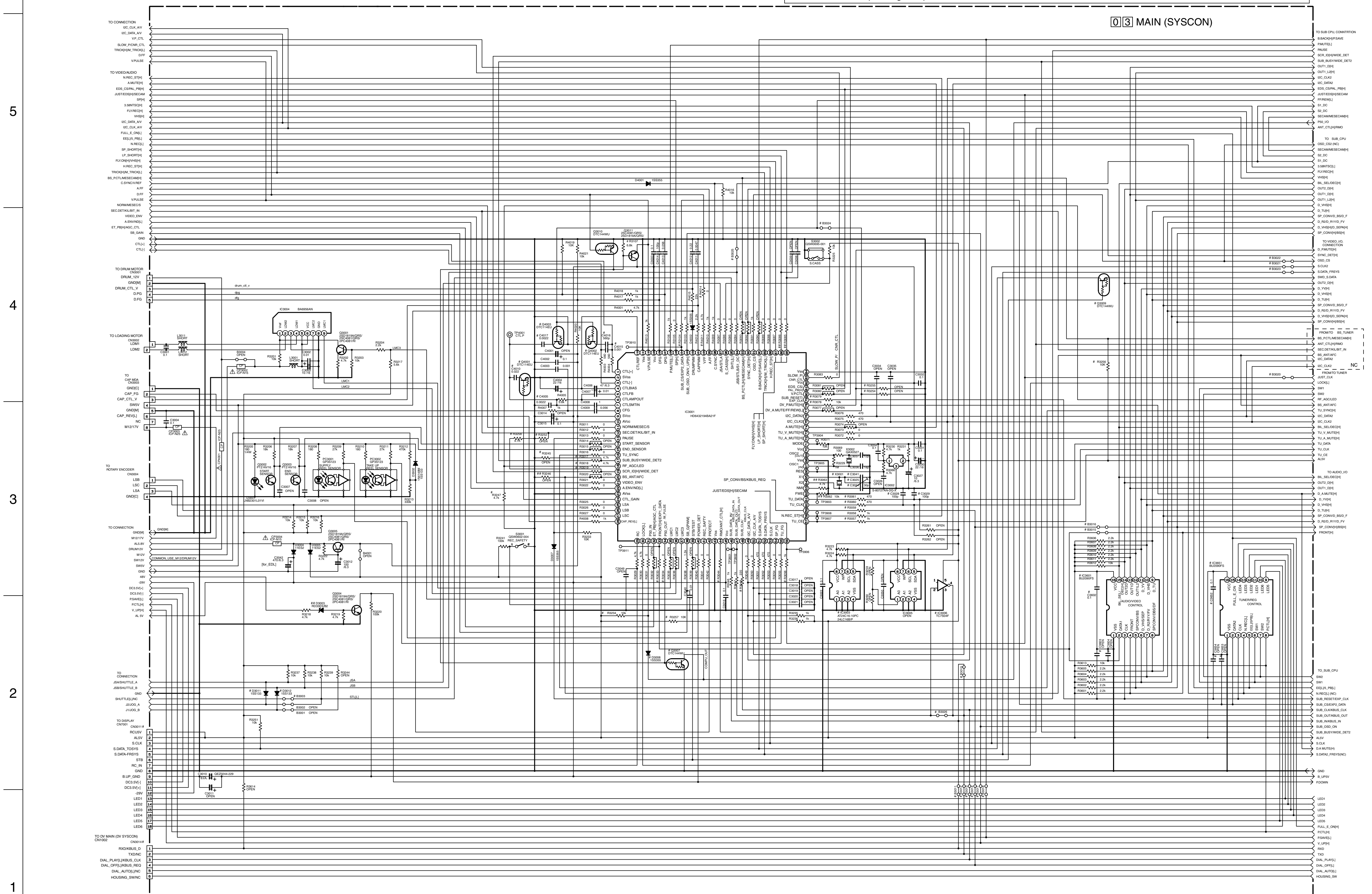
| SYMBOL / MODEL | CS2 |
|---|---|
| W/ BS | ○ |
| W/O BS | × |

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ALL NPN TYPE TRANSISTORS ARE 2SC4081/QRS/.
ALL PNP TYPE TRANSISTORS ARE 2SA1576A/QR/.
ALL NPN TYPE DIGITAL TRANSISTORS ARE DTC144WUA.
ALL PNP TYPE DIGITAL TRANSISTORS ARE DTA144WUA

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

# 4.4 SYSTEM CONTROL SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



03 MAIN (SYSCON)
TO CONNECTION
I2C_CLK_A/V
I2C_DATA_A/V
V.P_CTL
SLOW_P/CNR_CTL
TRICK[H]/M_TRICK[L]
D.FF
V.PULSE
TO VIDEO/AUDIO
N.REC_ST[H]
A.MUTE[H]
EDS_CS/PAL_PB[H]
JUST/EDS[H]/SECAM
SP[H]
3.58NTSC[H]
FLY.REC[H]
VHS[H]
FULL_E_ON[L]
EE[L]/5_PB[L]
N.REC[L]
SP_SHORT[H]
LP_SHORT[H]
FLY.ON[H]/VHS[H]
H.REC_ST[H]
BS_P.CTL/MESECAM[H]
C.SYNC/V.REF
A.FF
NORM/MESEC/S
SEC.DET/KIL/BIT_IN
VIDEO_ENV
A.ENV/ND[L]
ET_PB[H]/AGC_CTL
SB_GAIN
GND
CTL[+]
CTL[-]
TO DRUM MOTOR CN3001
DRUM_12V
GND[M]
DRUM_CTL_V
D.PG
D.FG
TO LOADING MOTOR CN3002
LDM1
LDM2
TO CAP MDA CN3003
GND[C]
CAP_FG
CAP_CTL_V
SW5V
CAP_REV[L]
NC
M12/17V
TO ROTARY ENCODER CN3004
LSB
LSC
LSA
AL5.8V
DRUM12V
M12V
SW12V
48V
-29V
DC3.5V[+]
DC3.5V[-]
P.SAVE[L]
P.CTL[H]
V_UP[H]
AL 5V
COMMON_USE_M12/DRUM12V
JSA/SHUTTLE_A
JSB/SHUTTLE_B
SHUTTLE[L]/NC
J2/JOG_A
J1/JOG_B
TO DISPLAY CN7001 CN3011#
RCU5V
AL5V
S.CLK
S.DATA_TOSYS
S.DATA-FRSYS
STB
RC_IN
B.UP_GND
LED1
LED2
LED3
LED4
LED5
LED6
TO DV MAIN (DV SYSCON) CN1002 CN3014#
RXD/KBUS_D
TXD/NC
DIAL_PLAY[L]/KBUS_CLK
DIAL_OFF[L]/KBUS_REQ
DIAL_AUTO[L]/NC
HOUSING_SW/NC
IC3004 BA6956AN
IC3001 HD6432194BA21F
IC3002 S-80727AN-DQ-X
# IC3003 AT24C16-10PC 24LC16B/P
IC3005 OPEN
# IC3006 TC7S04F
# IC3601 BU2090FS AUDIO/VIDEO CONTROL
# IC3651 BU2090FS TUNER/REG CONTROL
PC3001 GP3S123 SUPPLY REEL SENSOR
PC3002 GP3S123 TAKE UP REEL SENSOR
Q3002 PTZ-NV16 START SENSOR
Q3003 PTZ-NV16 END SENSOR
S3001 QSW0602-004 REC_SAFETY
S3002 QSW0695-001 S.CASS
X3002 QAX0527
TO SUB CPU, CONNTRTION
B.BACK[H]/P.SAVE
P.MUTE[L]
PAUSE
SCR_ID[H]/WIDE_DET
SUB_BUSY/WIDE_DET2
OUT1_D[H]
OUT1_L2[H]
I2C_CLK2
I2C_DATA2
FF/REW[L]
S1_DC
S2_DC
SECAM/MESECAM[H]
P50_I/O
ANT_CTL[H]/RMO
TO SUB_CPU
OSD_CS2 (NC)
3.58NTSC[L]
BIL_SEL/DEC[H]
OUT2_D[H]
D_VHS[H]
D_TU[H]
SP_CONV/D_BS/D_F
D_R2/D_R1Y/D_FV
D_VHS[H]/D_SEPA[H]
SP_CONV[H]/BS[H]
TO VIDEO_I/O, CONNECTION
D_P.MUTE[H]
SYNC_DET[H]
OSD_CS
S.CLK2
S.DATA_FRSYS
SWD_S.DATA
D_YV[H]
FROM/TO BS_TUNER
BS_ANT/AFC
NC
FROM/TO TUNER
JUST_CLK
LOCK[L]
SW1
SW2
RF_AGC/LED
TU_SYNC[H]
TU_V_MUTE[H]
TU_A_MUTE[H]
TU_DATA
TU_CLK
TU_CE
TO AUDIO_I/O
D_A.MUTE[H]
FRONT[H]
TO_SUB_CPU
EE[L]/5_PB[L]
N.REC[L] (NC)
SUB_RESET/EXP_CLK
SUB_CS/EXP2_DATA
SUB_CLK/KBUS_CLK
SUB_OUT/KBUS_OUT
SUB_IN/KBUS_IN
SUB_OSD_ON
D.A MUTE(H)
S.DATA2_FRSYS(NC)
B_UP5V
P.DOWN
FULL_E_ON[H]
RXD
TXD
DIAL_PLAY[L]
DIAL_OFF[L]
DIAL_AUTO[L]
HOUSING_SW


NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

## Marked elements may differ depending on the model. Be sure to check the Parts List.

p10290001a_rev3

## #DIFFERENCE TABLE

○ : Used
X : Not used

| ITEM | | HR-DVS2 /SR-VS20 EU/EK | MS | US | DOM | HM-HDS1 DOM | PAL | MS | US |
|---|---|---|---|---|---|---|---|---|---|
| JOG/S | B3003<br>D3011<br>D3012 | ○ | ○ | ○ | ○ | X | X | X | X |
| CTL_GAIN | C4010<br>Q4001 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| SEC.DET/KIL/BIT_IN | R3252 | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN |
| SUB_BUSY/W.DET2 | R3245 | X | X | X | X | X | X | X | X |
| | R3017 | 4.7k | 4.7k | 4.7k | 4.7k | 4.7k | 4.7k | 4.7k | 4.7k |
| RF_AGC/LED | R3018 | 4.7k | 4.7k | 4.7k | 4.7k | 4.7k | 4.7k | 4.7k | 4.7k |
| | R3247 | X | X | 4.7k | X | X | X | X | 4.7k |
| SCR_ID/WIDE | R3019 | 6.8k | 6.8k | X | 4.7k | 4.7k | 6.8k | 6.8k | X |
| | R3258 | 4.7k | 4.7k | X | X | X | 4.7k | 4.7k | X |
| P50_IN | R3234 | 10k | 10k | X | X | X | 10k | 10k | X |
| | Q3007<br>D3008 | ○ | ○ | X | X | X | ○ | ○ | X |
| RMO/ANT_CTL | R3257 | X | X | X | X | X | X | X | X |
| | R3044 | 0Ω | 0Ω | X | 1k | 1k | 0Ω | 0Ω | X |
| JUST/EDS/SECAM | R3056 | 1k | 1k | 1k | 1k | 1k | 1k | 1k | 1k |
| EEPROM | IC3003 | 16k | 16k | 8k | 8k | 8k | 8k | 8k | 8k |
| TU_CE/CLK/DATA | R3057<br>R3060<br>R3061 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | X |
| SP_CONV/BS/KBUS_REQ | R3059 | 1k | 1k | 1k | 1k | 470 | 470 | 470 | 470 |
| TU_CLK | C3028 | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN |
| TU_DATA | C3029 | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN |
| CRYSTAL | X3001 | QAX0445 | QAX0444 | QAX0444 | QAX0444 | QAX0444 | QAX0445 | QAX0444 | QAX0444 |
| | C3025 | ○ | X | X | X | X | ○ | X | X |
| | C3041 | X | 10p | 10p | 10p | 10p | X | 10p | 10p |
| | C3024 | 22p | 12p | 12p | 12p | 12p | 22p | 12p | 12p |
| EXPANDA | IC3601<br>IC3651<br>C3602<br>C3603<br>C3604<br>C3652<br>C3653<br>C3654 | X | X | X | X | ○ | ○ | ○ | ○ |
| FRONT[H]/EXP1_DATA | B3015 | ○ | ○ | ○ | ○ | X | X | X | X |
| SP_CONV/BS/KBUS_REQ | B3016 | ○ | ○ | ○ | ○ | X | X | X | X |
| JUST_CLK | B3020 | X | X | X | ○ | ○ | X | X | X |
| BS_P.CTL | R3256 | X | X | X | X | X | X | X | X |
| SUB_D.IN/KBUS | B3011 | X | X | X | X | ○ | ○ | ○ | ○ |
| D.IN/RXD | B3019 | X | X | X | X | 1k | 1k | 1k | 1k |
| SUB_D.OUT/KBUS<br>D.OUT/TXD | B3012 | X | X | X | X | X | X | X | X |
| SUB_CLK/KBUS<br>CLK/DIAL_PLAY | B3013 | X | X | X | X | ○ | ○ | ○ | ○ |
| SP_CONV/BS/KBUS_REQ<br>/DIAL_OFF | B3014 | X | X | X | X | ○ | ○ | ○ | ○ |
| CN3014 | CN3014 | 1-6pin | 1-6pin | 1-6pin | 1-6pin | 1-6pin | 1-6pin | 1-6pin | 1-6pin |
| KBUS_DATA | IC3006 | X | X | X | X | ○ | ○ | ○ | ○ |
| | B3026 | ○ | ○ | ○ | ○ | X | X | X | X |
| SUB_OSD_ON/V.UP | B3017 | X | X | X | X | ○ | ○ | ○ | ○ |
| D_P.MUTE | R3078 | 1k (10kΩ) | 1k | 1k | 1k | 1k | 1k | 1k | 1k |
| | R3255 | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN |
| D_A.MUTE/FF/REW | R3254 | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN | OPEN |
| | B3024 | X | X | X | X | ○ | ○ | ○ | ○ |
| EDS | Q3009 | X | X | ○ | X | X | X | X | ○ |
| OSD | B3021<br>B3022<br>B3023 | X | X | X | X | ○ | ○ | ○ | ○ |
| JBS/STLB/S1_DC | B3025 | X | X | X | X | ○ | X | X | X |
| CN3011 | CN3011 | 1-18pin | 1-18pin | 1-18pin | 1-18pin | 1-18pin | 1-18pin | 1-18pin | 1-18pin |
| SUB_RESET/EXP.CLK | R3079 | 1k | 1k | 1k | 1k | 1k | 1k | 1k | 1k |
| FF/REW | C4015 | 680p (330p) | 680p | 0.001 | 680p | 680p | 680p | 680p | 0.001 |
| | Q4002<br>C4016 | ○ | ○ | X | ○ | ○ | ○ | ○ | X |
| | Q4003<br>C4017 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | C4005 | X | X | X | X | X | X | X | X |
| SUB_CLK/KBUS_CLK | R3048 | 220 | 220 | 220 | 220 | 220 | 220 | 220 | 220 |
| B.BACK/P.SAVE | B3018 | X | X | X | X | ○ | ○ | ○ | ○ |
| IN_SELA/EXP1_DATA | R3033 | 0Ω | 0Ω | 0Ω | 0Ω | 1k | 1k | 1k | 1k |
| SUB_CS/EXP2_DATA | R3104 | 4.7k | 4.7k | 4.7k | 4.7k | 1k | 1k | 1k | 1k |
| M_PULSE | Q3010<br>Q3011<br>R3107 | X | X | ○ | ○ | ○ | X | X | ○ |
| P50_OUT/M_PULSE | R3034 | 0Ω | 0Ω | 4.7k | 4.7k | 4.7k | 0Ω | 0Ω | 4.7k |
| V.FF | R4011 | 4.7k (2.2k) | 4.7k | 1k | 1k | 2.7k | 2.7k | 2.7k | 2.7k |
| | R4014 | 0Ω (2.2k) | 0Ω | 1.8k | 1.8k | 0Ω | 0Ω | 0Ω | 0Ω |

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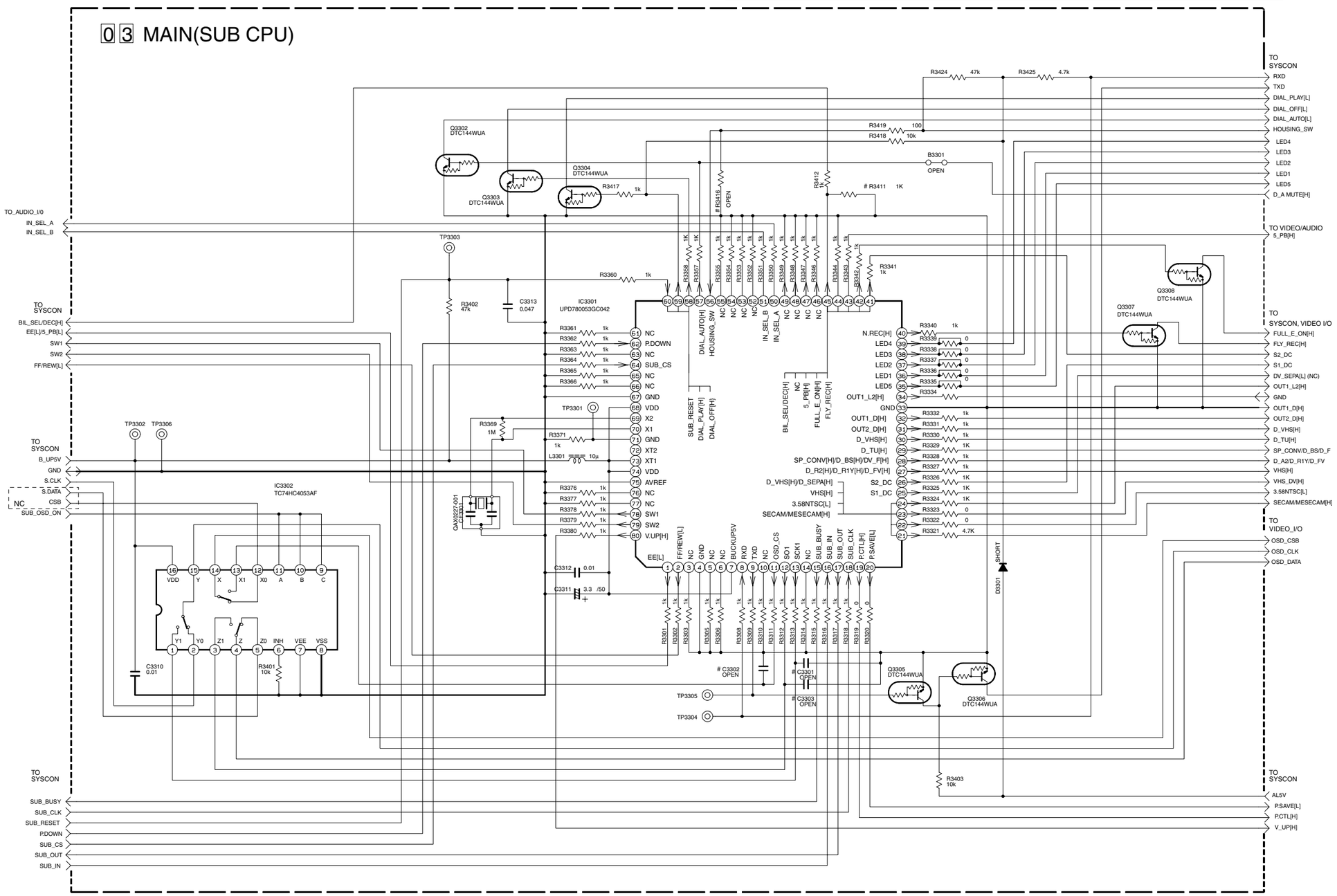
*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*

## 4.5 SUB CPU SCHEMTIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



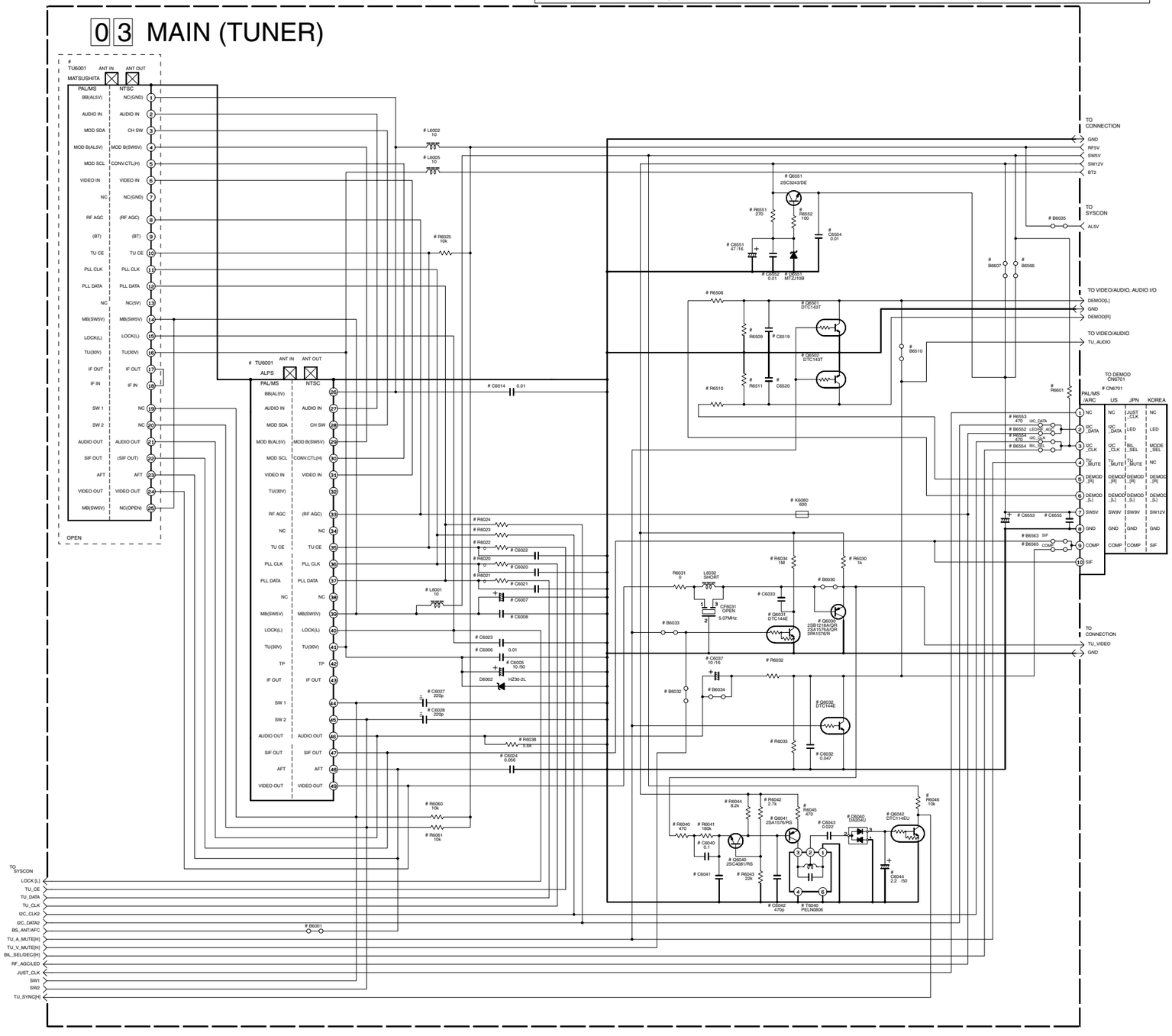

# MARK ELEMENTS ARE NOT MOUNTED.
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

p20174001a_rev1

## 4.6 TUNER SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*




NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC
MY MYLER
N NON POLAR

# DIFFERENCE TABLE

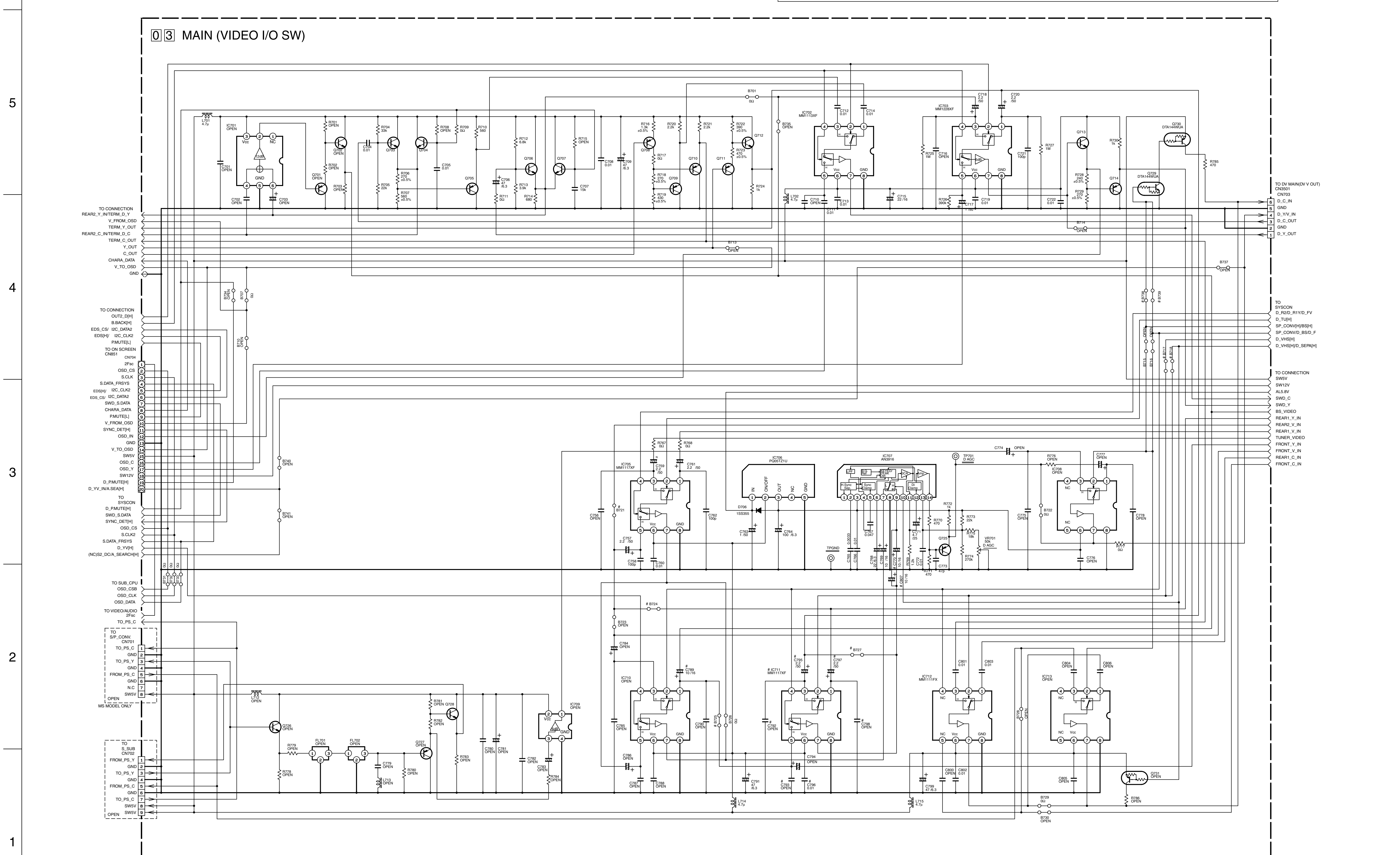
○ Used
× Not Used

| TUNER | SYMBOL | EU/EK | FRANCE MS | JAPAN | | US | |
|---|---|---|---|---|---|---|---|
| | | | | DVS2 | HDS1 | DVS2/VS20 | HDS1 |
| TUNER | TU6001 | ALPS QAU0151 | ALPS QAU0152 | MATSUSHITA QAU0198 | MATSUSHITA QAU0198 | ALPS QAU0163 | ALPS QAU0163 |
| | R6025,B6035 | × | × | × | × | × | × |
| ATS+ | K6080 | ○ | ○ | × | × | × | × |
| VIDEO BUFFER | R6030,Q6030 | ○ | ○ | ○ | ○ | × | × |
| | B6030 | × | × | × | × | ○ | ○ |
| TU_V_MUTE | Q6031 | ○ | ○ | ○ | × | × | × |
| | R6034 | × | × | ○ | × | × | × |
| | C6033 | 0 | 0 | 0.0047 | × | × | × |
| | B6032 | ○ | ○ | × | × | × | × |
| TU_A_MUTE | Q6032 | ○ | ○ | × | × | × | × |
| | B6033 | × | × | ○ | × | × | × |
| AUDIO OUT | R6032 | 3.9k | 3.3k | 0 | 0 | 12k | 12k |
| | R6033 | 1.8k | 1.8k | × | × | × | × |
| | R6038 | × | × | × | × | × | × |
| | C6032 | 0.047 | × | × | × | × | × |
| | B6034 | × | × | ○ | ○ | ○ | ○ |
| | C6037 | ○ | ○ | × | × | × | × |
| AFC | B6001 | ○ | ○ | × | × | ○ | × |
| | C6024 | × | × | × | × | × | × |
| CENELEC | C6027,C6028 | × | ○ | × | × | × | × |
| TU(30V) | C6005 | × | × | × | × | × | × |
| | C6006 | × | × | × | × | × | × |
| | L6005 | 10 | 10 | SHORT | SHORT | SHORT | SHORT |
| MB(SW5V) | C6007 | 330/10 | 330/10 | × | × | × | × |
| | C6008 | × | × | × | × | × | × |
| | L6001 | ○ | ○ | SHORT | SHORT | SHORT | SHORT |
| BB(AL5V) | C6014,L6002 | ○ | ○ | × | × | × | × |
| PLL CLK | R6020 | 470 | 470 | 1k | 1k | 1k | 1k |
| | R6023 | × | × | × | × | × | × |
| | C6020 | × | × | × | × | × | × |
| PLL DATA | R6021 | 470 | 470 | 1k | 1k | 1k | 1k |
| | R6024 | × | × | × | × | × | × |
| | C6021 | × | × | × | × | × | × |
| TU CE | R6022 | 470 | 470 | 1k | 1k | 1k | 1k |
| | C6022 | × | × | × | × | × | × |
| LOCK | C6023 | ○ | ○ | × | × | × | × |
| SYSTEM SW | R6060,R6061 | ○ | ○ | × | × | × | × |
| SYNC DET | R6040–R6046, C6040–C6044, Q6040–Q6042, D6040,T6040 | × | × | × | × | ○ | ○ |

| DEMOD | SYMBOL | EU/EK | FRANCE MS | JAPAN | | US | |
|---|---|---|---|---|---|---|---|
| | | | | DVS2 | HDS1 | DVS2/VS20 | HDS1 |
| DEMOD PWB ASSY | CN6701 | LPA10094* | LPA10094* | PB11087* | PB11087* | PB11076* | PB11076* |
| 9V REG | R6551,R6552, Q6551,D6551 | × | × | ○ | ○ | ○ | ○ |
| | C6551,C6552 | × | × | × | × | × | × |
| DEMOD REG PASS CON | C6553 | 33/16 | 33/16 | × | × | × | × |
| | C6554 | × | × | × | × | × | × |
| | C6555 | 0.01 | 0.01 | × | × | × | × |
| SW12V | B6607 | × | × | × | × | × | × |
| DEMOD OUT | R6508,R6510 | 0 | 0 | 0 | 0 | 0 | 0 |
| | R6509,R6511 | × | × | × | × | × | × |
| | C6519,C6520 | × | × | × | × | × | × |
| MUTE | Q6501,Q6502 | × | × | × | × | ○ | ○ |
| TUNER MONO | B6510 | × | × | × | × | × | × |
| DEMOD SELECTION | R6553,R6554 | 0 | 0 | × | × | 0 | 0 |
| | B6552,B6554 | × | × | ○ | ○ | × | × |
| | B6563 | × | × | × | × | × | × |
| | B6565 | × | × | ○ | ○ | ○ | ○ |
| | B6566 | ○ | ○ | × | × | × | × |
| | R6601 | × | × | × | × | × | × |

## 4.7 VIDEO I/O SWITCH SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



0 3 MAIN (VIDEO I/O SW)
TO CONNECTION
REAR2_Y_IN/TERM_D_Y
V_FROM_OSD
TERM_Y_OUT
REAR2_C_IN/TERM_D_C
TERM_C_OUT
Y_OUT
C_OUT
CHARA_DATA
V_TO_OSD
GND
TO CONNECTION
OUT2_D[H]
B.BACK[H]
EDS_CS/ I2C_DATA2
EDS[H]/ I2C_CLK2
P.MUTE[L]
TO ON SCREEN CN851
CN704
2Fsc
OSD_CS
S.CLK
S.DATA_FRSYS
EDS[H]/ I2C_CLK2
EDS_CS/ I2C_DATA2
SWD_S.DATA
CHARA_DATA
P.MUTE[L]
V_FROM_OSD
SYNC_DET[H]
OSD_IN
GND
V_TO_OSD
SW5V
OSD_C
OSD_Y
SW12V
D_P.MUTE[H]
D_YV_IN/A.SEA[H]
TO SYSCON
D_P.MUTE[H]
SWD_S.DATA
SYNC_DET[H]
OSD_CS
S.CLK2
S.DATA_FRSYS
D_YV[H]
(NC)S2_DC/A_SEARCH[H]
TO SUB_CPU
OSD_CSB
OSD_CLK
OSD_DATA
TO VIDEO/AUDIO
2Fsc
TO_PS_C
TO S/P_CONV. CN701
TO_PS_C
GND
TO_PS_Y
GND
FROM_PS_C
GND
N.C
SW5V
OPEN
MS MODEL ONLY
TO S_SUB CN702
FROM_PS_Y
GND
TO_PS_Y
GND
FROM_PS_C
GND
TO_PS_C
SW5V
SW5V
OPEN
IC701 OPEN
IC702 MM1113XF
IC703 MM1228XF
IC705 MM1117XF
IC706 PQ05TZ1U
IC707 AN3916
IC708 OPEN
IC709 OPEN
IC710 OPEN
IC711 MM1117XF
IC712 MM1111FX
IC713 OPEN
Q729 DTA144WUA
Q730 DTA144WUA
Q731 OPEN
D706 1SS355
TP701 D AGC
TPGND
VR701 50k D AGC
TO DV MAIN(DV V OUT) CN3501
CN703
D_C_IN
GND
D_Y/V_IN
D_C_OUT
GND
D_Y_OUT
TO SYSCON
D_R2/D_R1Y/D_FV
D_TU[H]
SP_CONV[H]/BS[H]
SP_CONV/D_BS/D_F
D_VHS[H]
D_VHS[H]/D_SEPA[H]
TO CONNECTION
SW5V
SW12V
AL5.8V
SWD_C
SWD_Y
BS_VIDEO
REAR1_Y_IN
REAR2_V_IN
REAR1_V_IN
TUNER_VIDEO
FRONT_Y_IN
FRONT_V_IN
REAR1_C_IN
FRONT_C_IN


○ : Used
x : Not used

# DIFFERENCE TABLE

| S.NO / MODEL | IC711 C789, C792, C793, C795~ C798, C807 B717, B721, B725, B739 | C770 B718, B724, B727, B738 |
|---|---|---|
| DOM | ○ | X |
| US | X | ○ |

NOTES: UNLESS OTHERWISE SPECIFIED.
- ALL RESISTANCE VALUES ARE IN OHMS.
- ALL INDUCTANCE VALUES ARE IN H.
- ALL CAPACITANCE VALUES ARE IN μF.

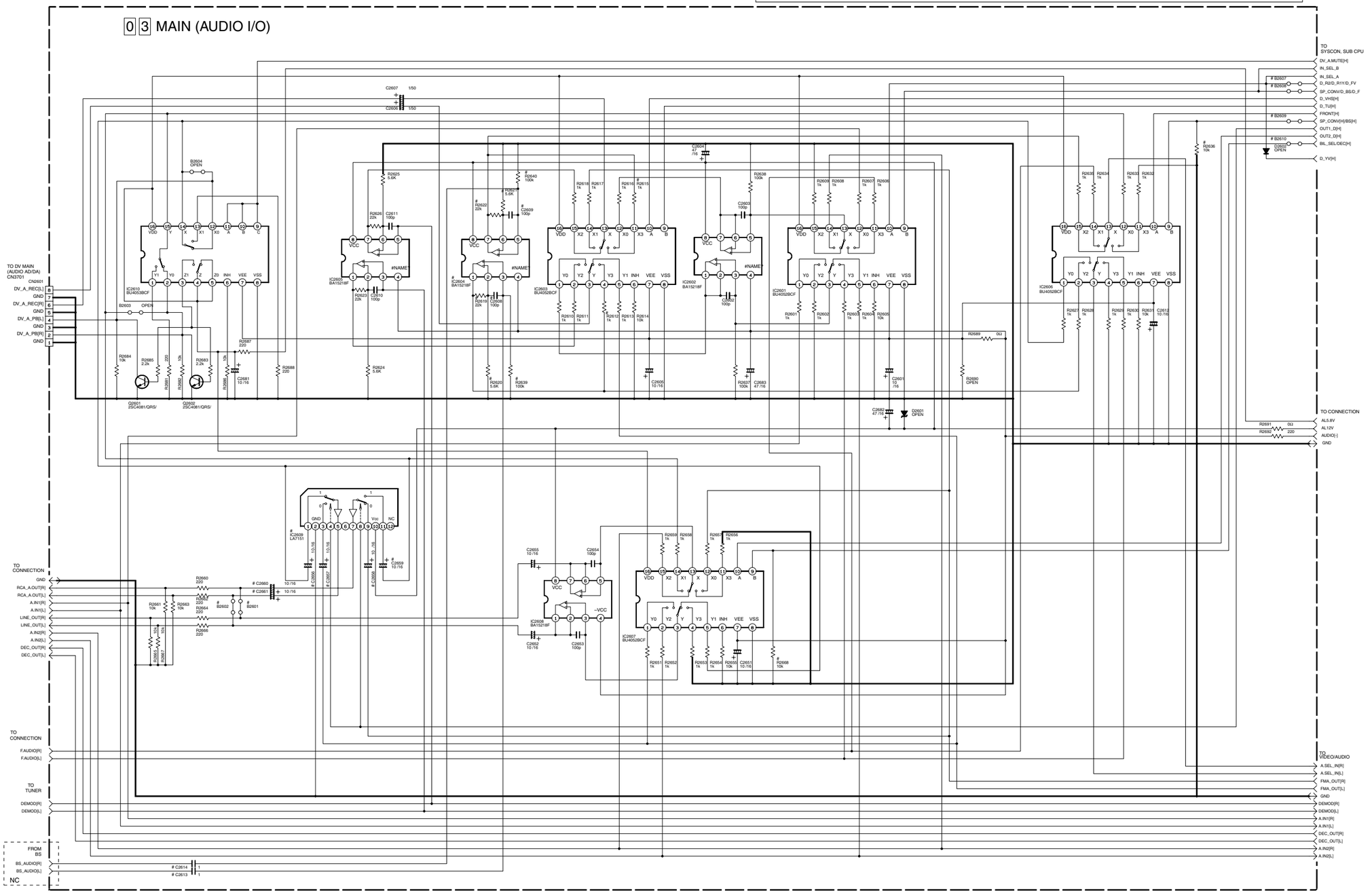
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

ALL NPN TYPE TRANSISTORS ARE 2SC4081/QRS/.
ALL PNP TYPE TRANSISTORS ARE 2SA1576A/QR/.

p10327001a_rev0

## 4.8 AUDIO I/O SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*




p10336001a_rev0

# DIFFERENCE TABLE

○ Used
× Not used

| SYMBOL / MODEL | B2601,B2602 B2607,B2608 | IC2609 C2656-C2661 |
|---|---|---|
| With DVC | × | ○ |
| With HDD | ○ | × |

| SYMBOL / MODEL | B2609 R2668 | B2610 R2636 |
|---|---|---|
| NTSC | ○ | × |
| PAL/MS | × | ○ |

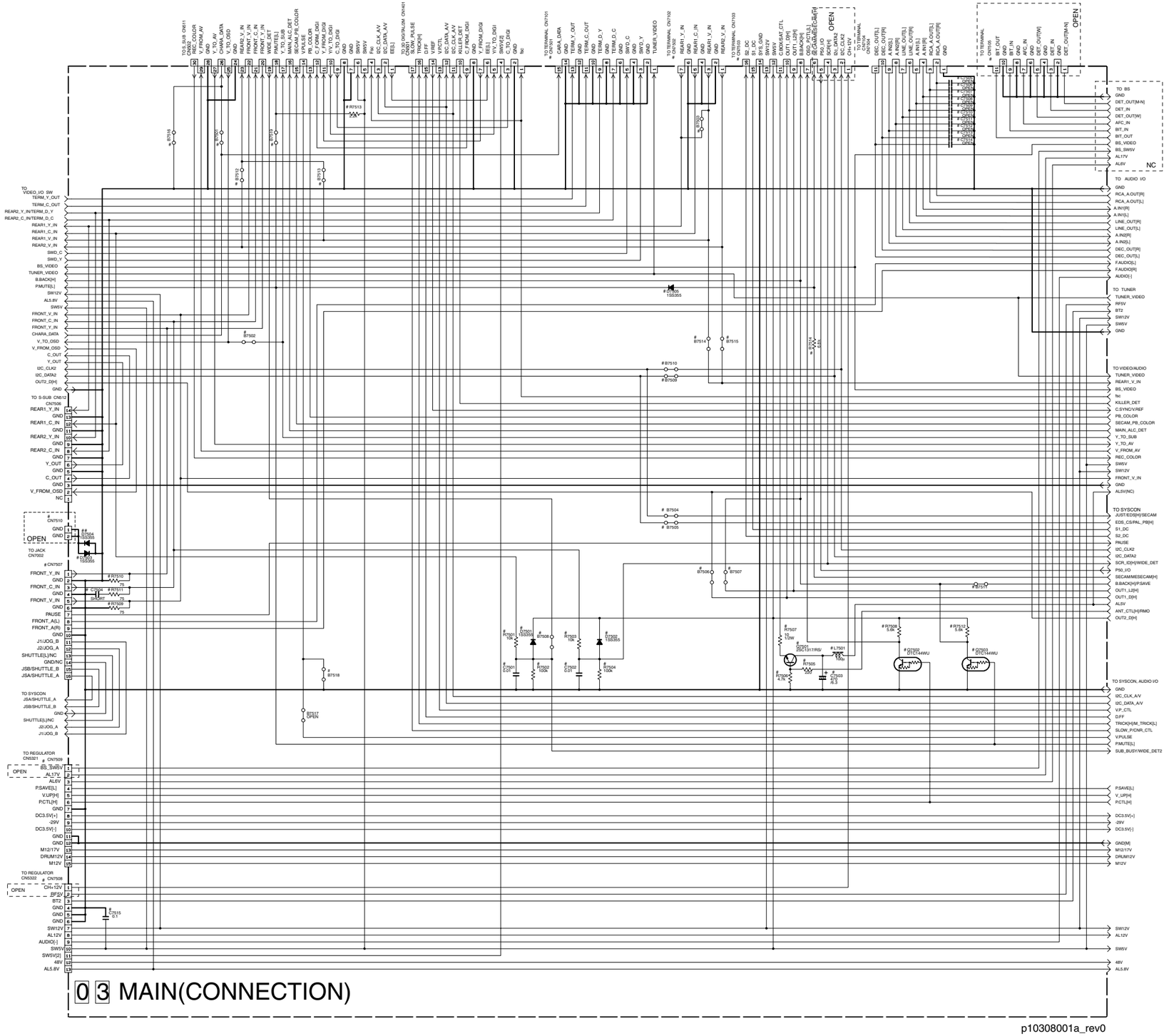
| SYMBOL / MODEL | IC2604 _R2612,R2615 R2619-R2622,R2638,R2640 C2608,C2609,C2613,C2614 |
|---|---|
| With BS | ○ |
| W/O BS | × |

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.9 CONNECTION SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*




○ Used
X Not used

# DIFFERENCE TABLE

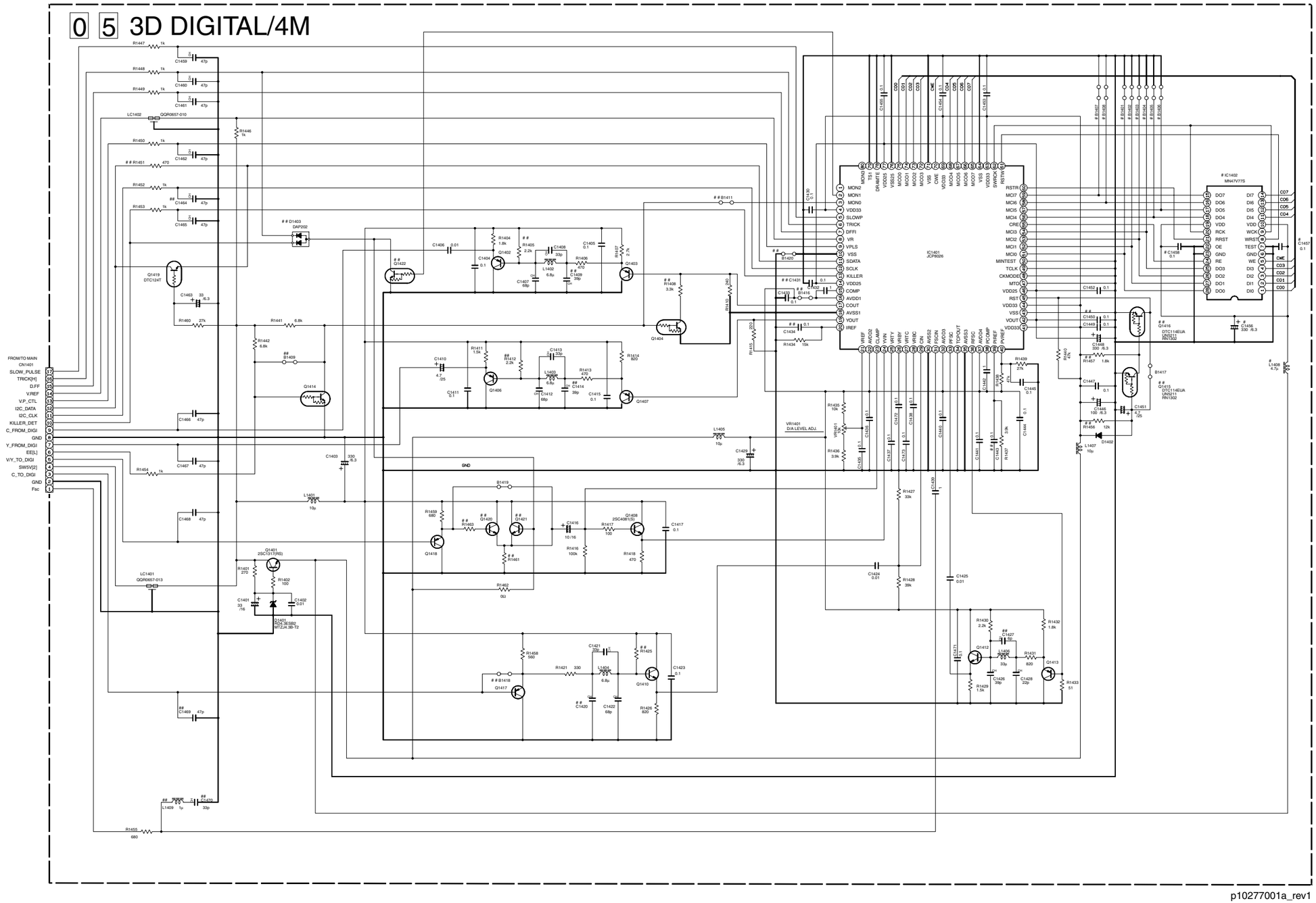
| | DVS2/VS20 EU | EK | MS | DOM | US | HM-HDS1 DOM | US |
|---|---|---|---|---|---|---|---|
| B7501 | X | X | X | X | X | ○ | |
| B7502 | X | X | X | X | X | X | |
| B7503 | ○ | ○ | ○ | X | X | X | |
| B7504 | X | X | X | X | ○ | X | |
| B7505 | X | X | X | X | ○ | X | |
| B7506 | X | X | X | X | X | X | |
| B7507 | X | X | X | X | X | X | |
| B7508 | X | X | X | ○ | X | X | |
| B7509 | ○ | ○ | ○ | X | X | X | |
| B7510 | ○ | ○ | ○ | X | X | X | |
| B7511 | ○ | ○ | ○ | ○ | ○ | X | |
| B7512 | ○ | ○ | ○ | X | X | X | |
| B7513 | X | X | X | ○ | ○ | ○ | |
| B7514 | ○ | ○ | ○ | X | X | X | |
| B7515 | X | X | X | ○ | ○ | ○ | |
| B7516 | ○ | ○ | ○ | ○ | ○ | X | |
| B7517 | X | X | X | X | X | X | |
| B7518 | ○ | ○ | ○ | ○ | ○ | ○ | |
| B7519 | X | X | X | ○ | ○ | ○ | |
| R7513 | ○ | ○ | ○ | X | X | X | |
| R7501<br>R7502<br>R7503<br>R7504<br>C7501<br>C7502<br>D7501<br>D7502 | X | X | X | X | X | ○ | |
| C7505<br>-C7514 | X | X | X | X | X | X | |
| C7515 | X | X | X | ○ | ○ | ○ | |
| Q7501<br>R7505<br>R7506<br>R7507<br>L7501<br>C7503 | ○ | ○ | ○ | X | ○ | X | |
| R7508<br>Q7502 | ○ | ○ | ○ | ○ | ○ | X | |
| R7512<br>Q7503 | X | X | X | X | X | ○ | |
| R7509<br>R7510<br>R7511<br>C7504 | X | X | X | X | X | X | |
| CN7510<br>D7503 | X | X | X | X | X | X | |
| CN7501 | 1-15 | 1-15 | 1-15 | 3-15 | 3-15 | 3-6 | |
| CN7502 | 1-5 | 1-5 | 1-5 | 1-7 | 1-7 | 1-7 | |
| CN7503 | 1-14 | 1-14 | 1-14 | 7-16 | 7-16 | 8-15 | |
| CN7505 | X | X | X | 1-11 | X | 1-11 | |
| CN7507 | 1-16 | 1-16 | 1-16 | 1-16 | 1-16 | 1-10 | |
| CN7508 | 1-13 | 1-13 | 1-13 | 3-13 | 3-13 | 3-13 | |
| CN7509 | 3-15 | 3-15 | 3-15 | 1-15 | 3-15 | 1-15 | |
| D7505 | ○ | ○ | ○ | X | X | X | |
| R7514 | ○ | ○ | ○ | X | X | X | |

## Marked elements may differ depending on the model.
Be sure to check the Parts List.

NOTES-UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.10 3D DIGITAL / 4M SCHEMATIC DIAGRAM




NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

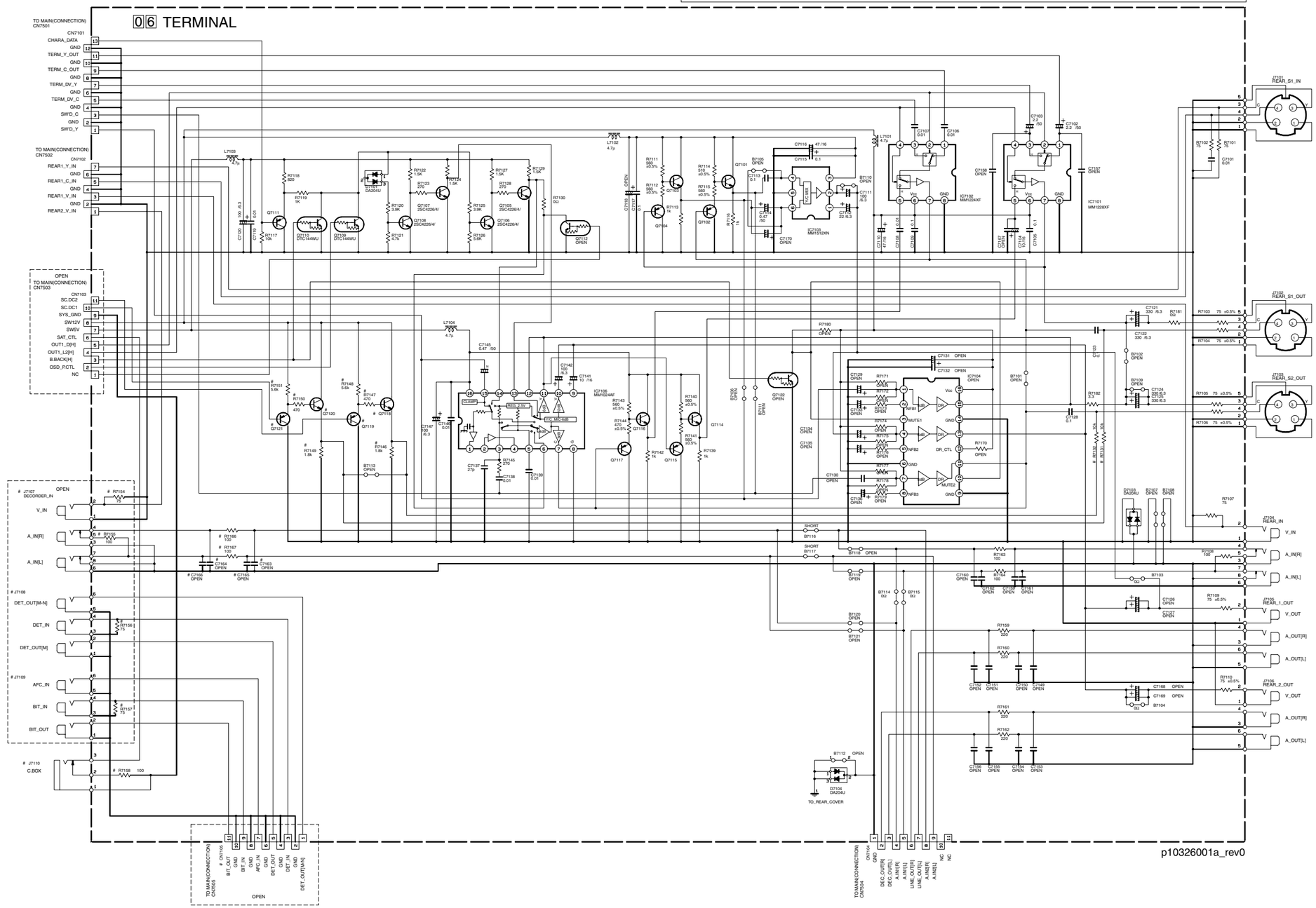
## MARK ELEMENTS ARE NOT MOUNTED.
ALL DIODES ARE 1SS133 OR 1N4148
ALL PNP TYPE TRANSISTORS ARE 2SA1576A(QR) OR 2PA1576
ALL NPN TYPE TRANSISTORS ARE 2SC4081(QRS) OR 2PC4081
ALL NPN TYPE DIGITAL TRANSISTORS ARE DTC144WUA OR UN521E OR RN1309

# DIFFERENCE TABLE

| SYSTEM | IC1402,L1408 C1456,C1457,C1458, | B1401-B1408 |
|---|---|---|
| 4M | ○ | × |
| 2M | × | ○ |

## 4.11 TERMINAL SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



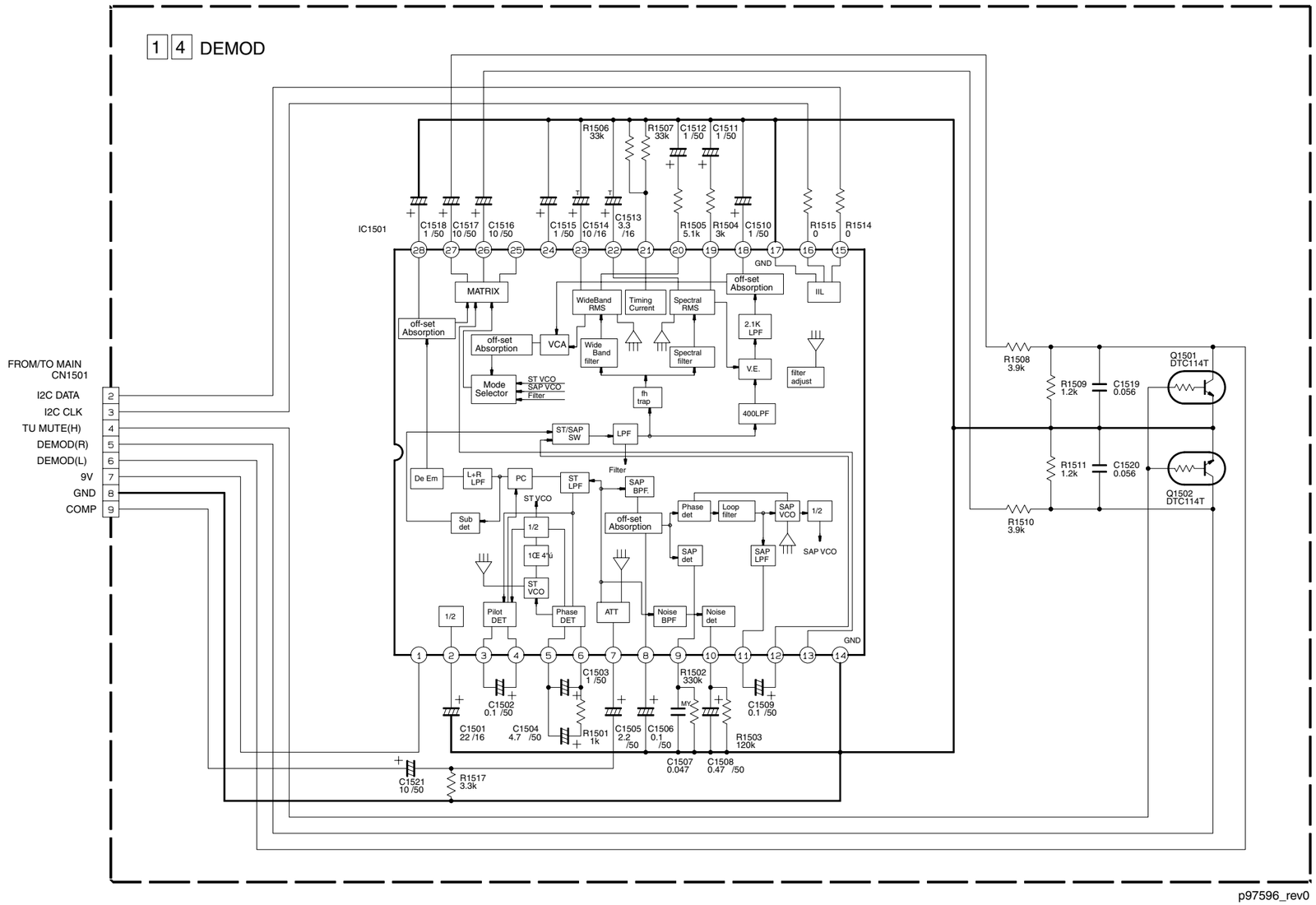

# DIFFERENCE TABLE ○ : Used × : Not used

| | Q7118-Q7121 R7131-R7132 R7146-R7151 R7154-R7157 R7166 R7167 C7163-C7166 CN7105 J7107-J7109 | R7158 J7110 |
|---|---|---|
| DOM | ○ | × |
| US | × | ○ |

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ALL PNP TYPE TRANSISTORS ARE 2SA1576/QR/.
ALL NPN TYPE TRANSISTORS ARE 2SC4081/QRS/.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.12 DEMODULATOR SCHEMATIC DIAGRAM



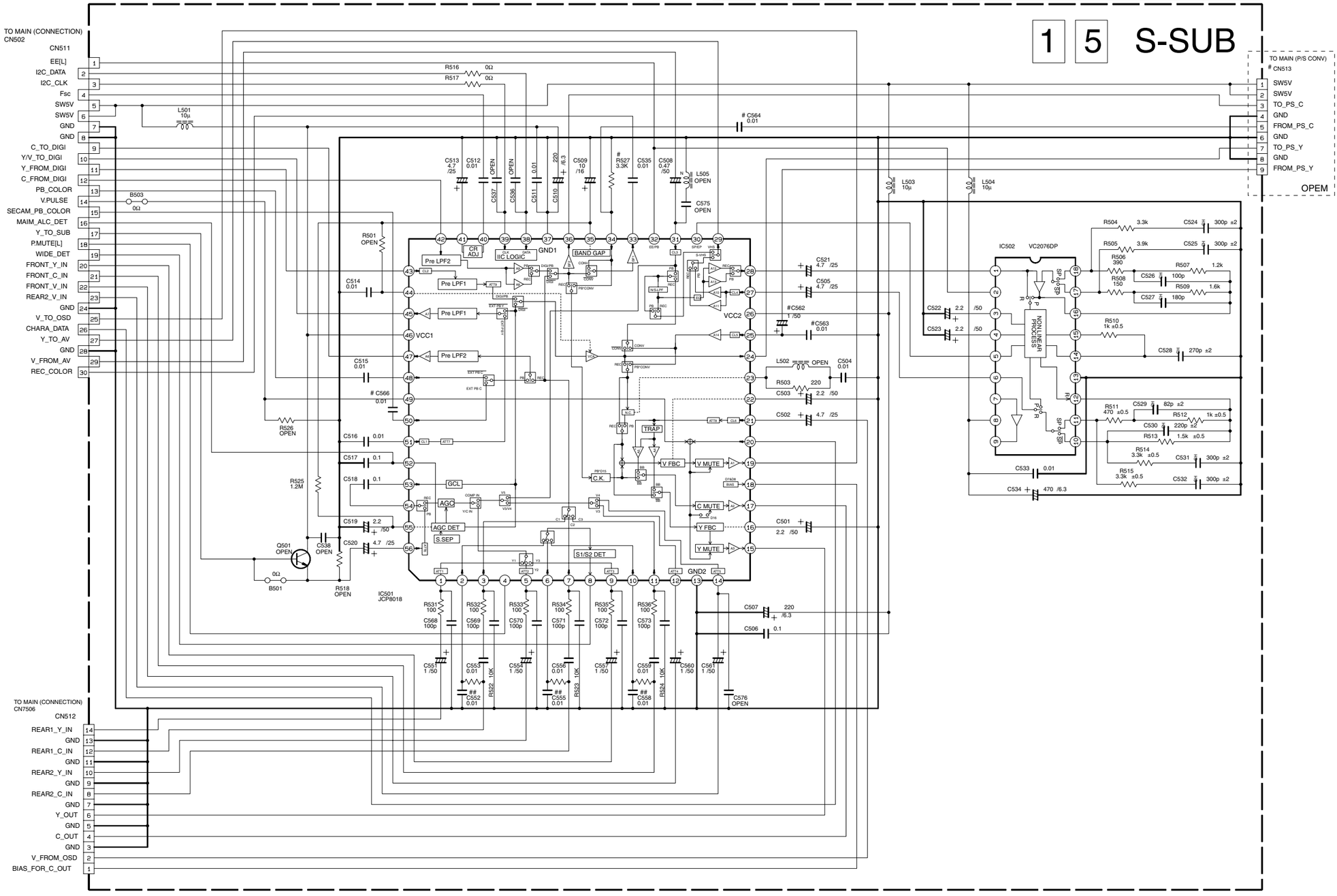

p97596_rev0

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
TANTAL

## 4.13 S-SUB SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



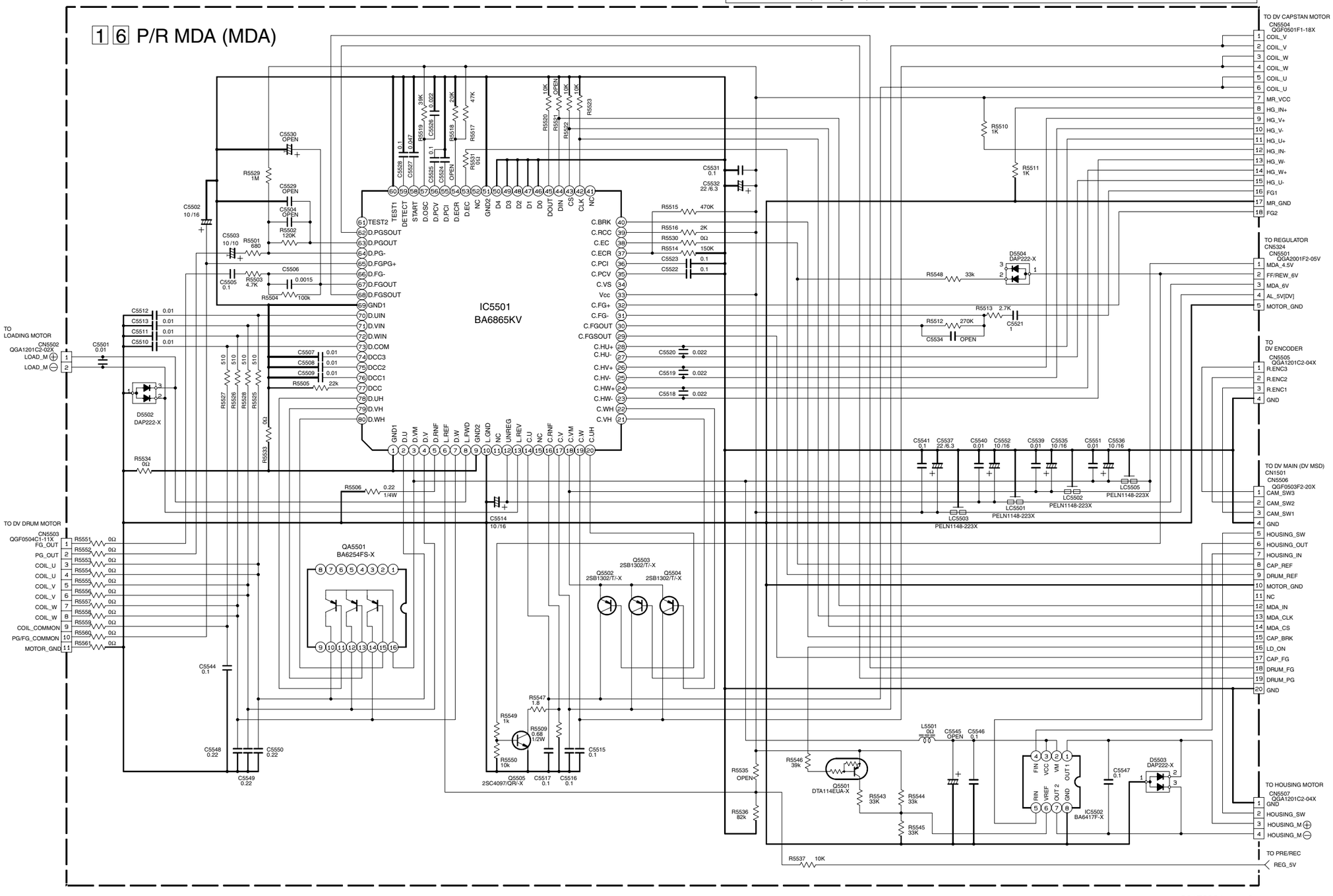

| # DIFFERENCE TABLE | ○ Used / × Not used | |
|---|---|---|
| | CN513 C562 C564 C566 | C563 R527 |
| MS | ○ | × |
| OTHERS | × | ○ |

## Marked elements may differ depending on the model. Be sure to check the Parts List.

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

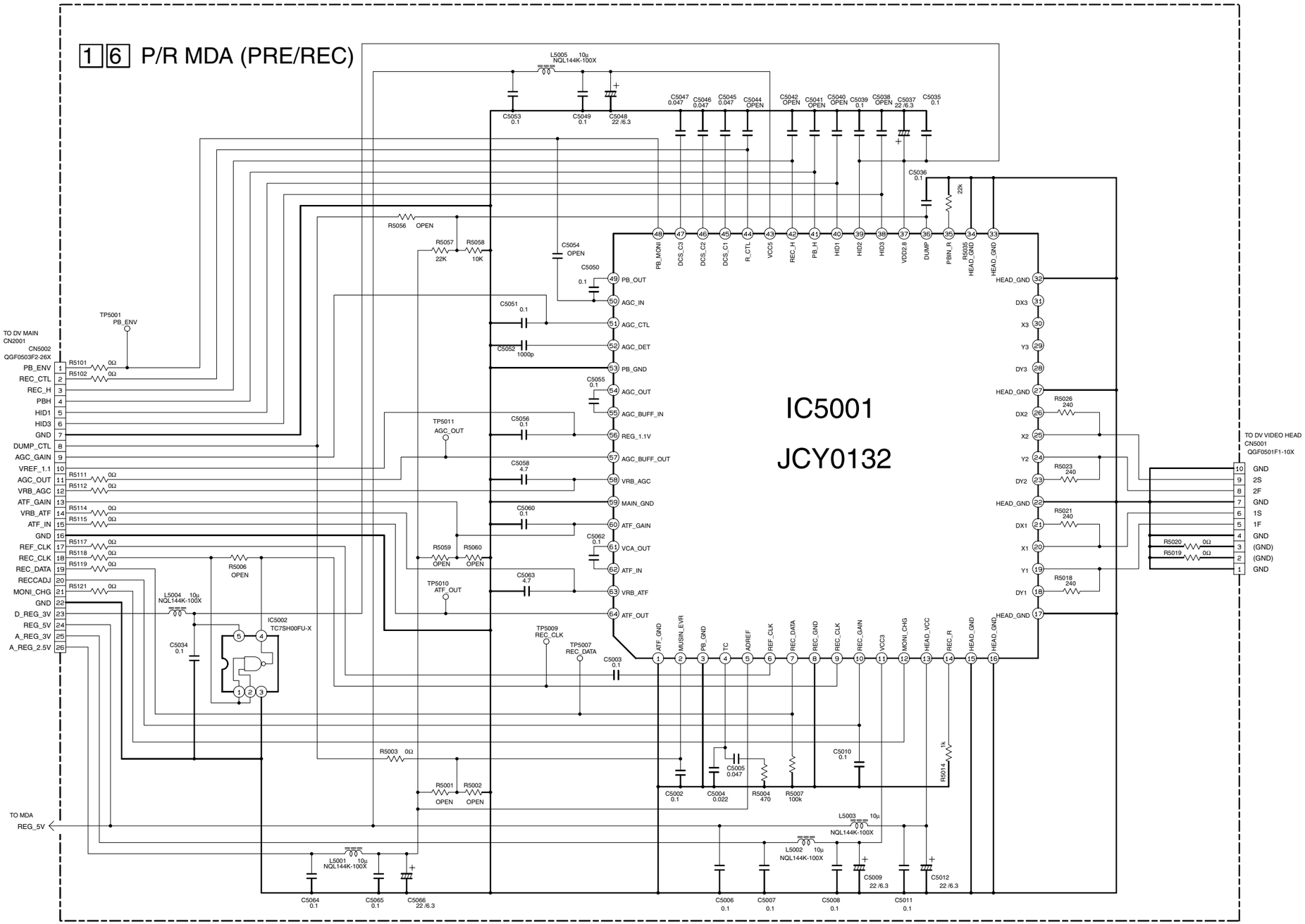
## 4.14 MDA SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



## 4.15 PRE / REC SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



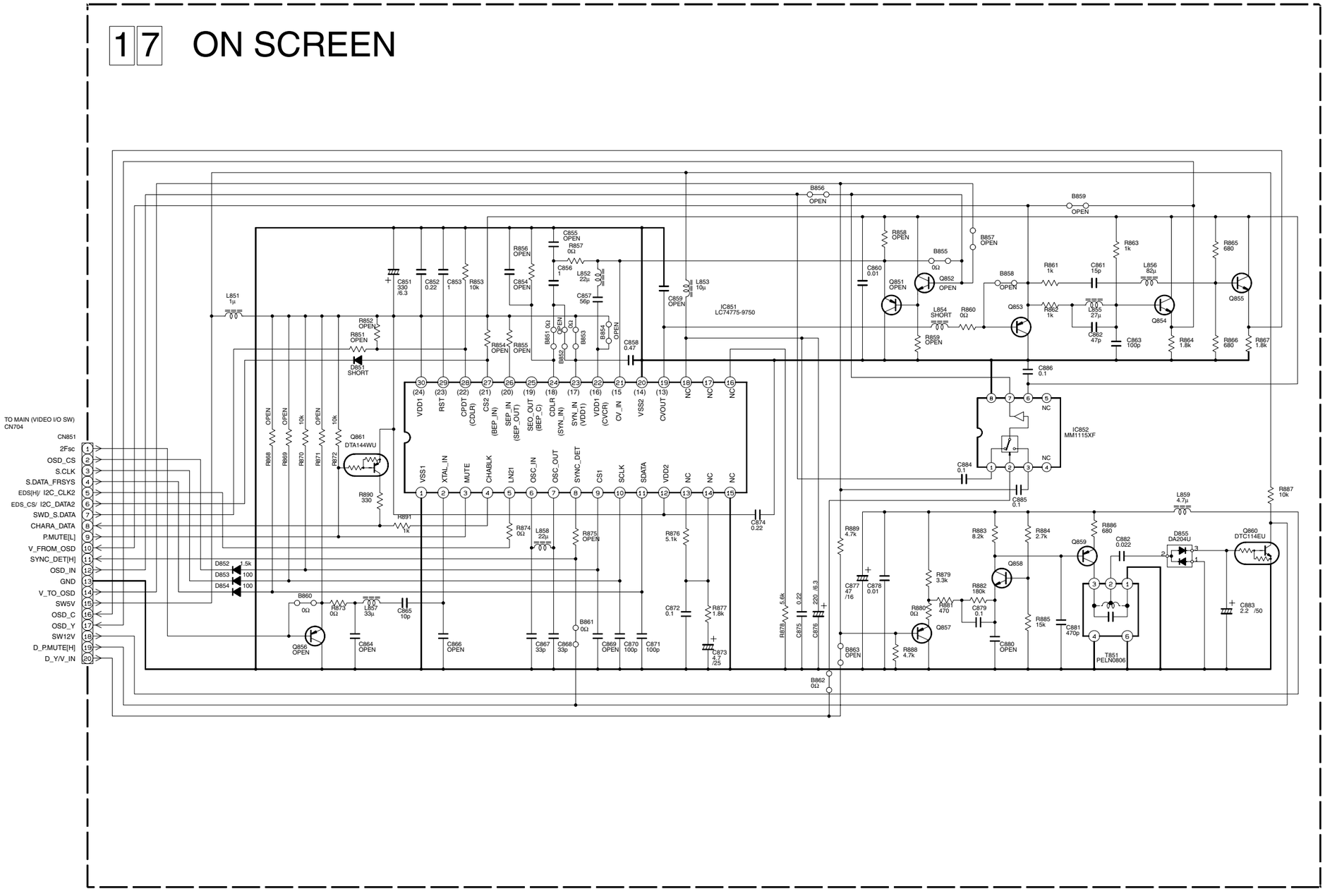

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.16 ON SCREEN SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*

# 17 ON SCREEN




p20192001a_rev0

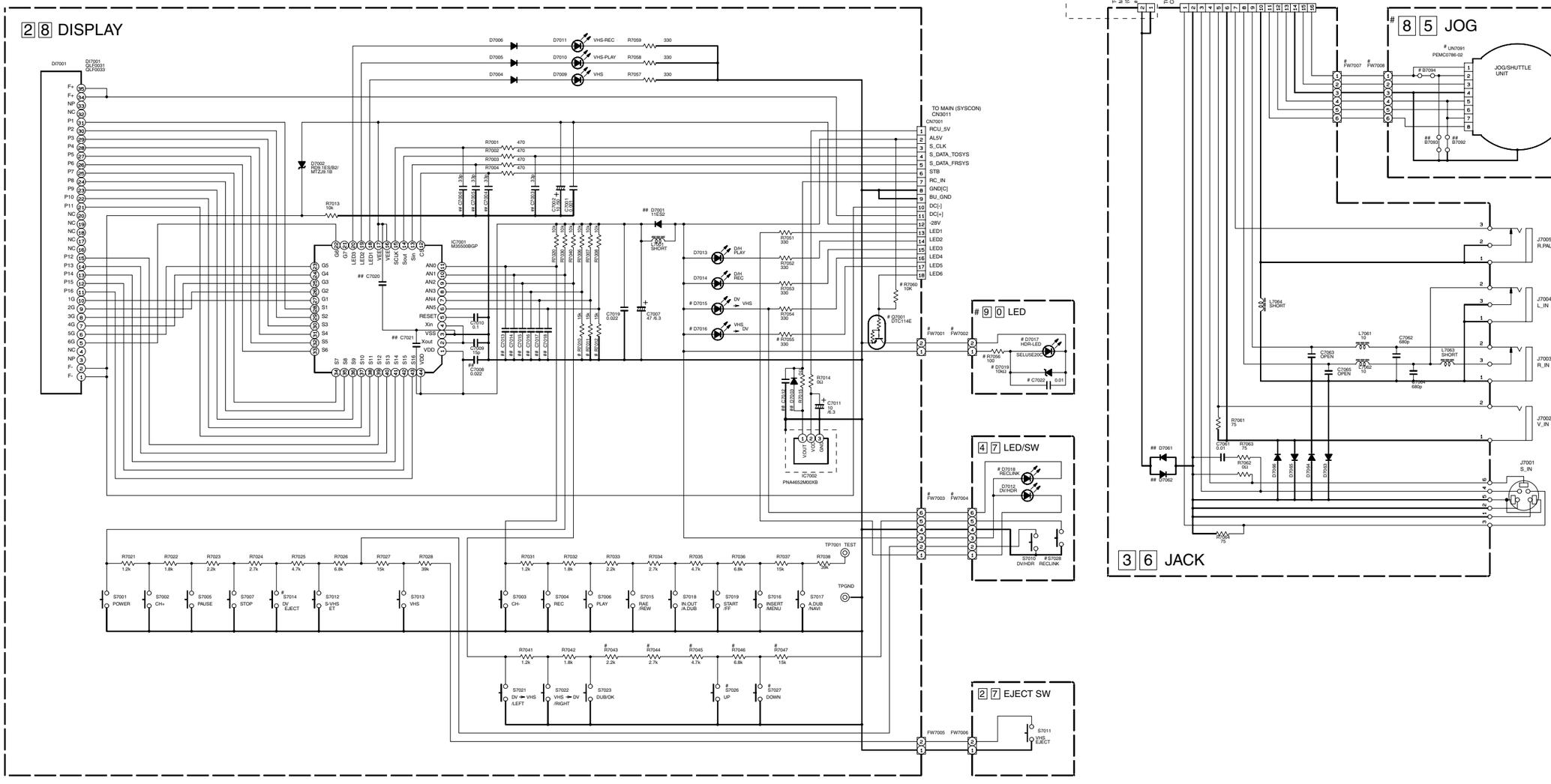
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

ALL NPN TYPE TRANSISTORS ARE 2SC4081/QRS/.
ALL PNP TYPE TRANSISTORS ARE 2SA1576A/QR/.

## 4.17 DISPLAY, EJECT SW, LED/SW, JACK AND JOG SCHEMATIC DAIGRAMS

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*




p10309001a_rev1

# DIFFERENCE TABLE

○ Used
X Not used

| | 8 5 JOG UN7091 B7094 FW7007 FW7008 | CN7002 | 8 6 LED D7017 FW7001 FW7002 R7060 Q7001 | D7018 S7026 S7027 S7028 | R7043 R7044 R7045 R7046 R7047 | S7014 D7015 D7016 R7055 | FW7003 FW7004 |
|---|---|---|---|---|---|---|---|
| DVS2 /VS20 | ○ | 1-16 | X | | | ○ | 1-4 |
| HDS1 | X | 1-10 | ○ | | | X | 1-6 |

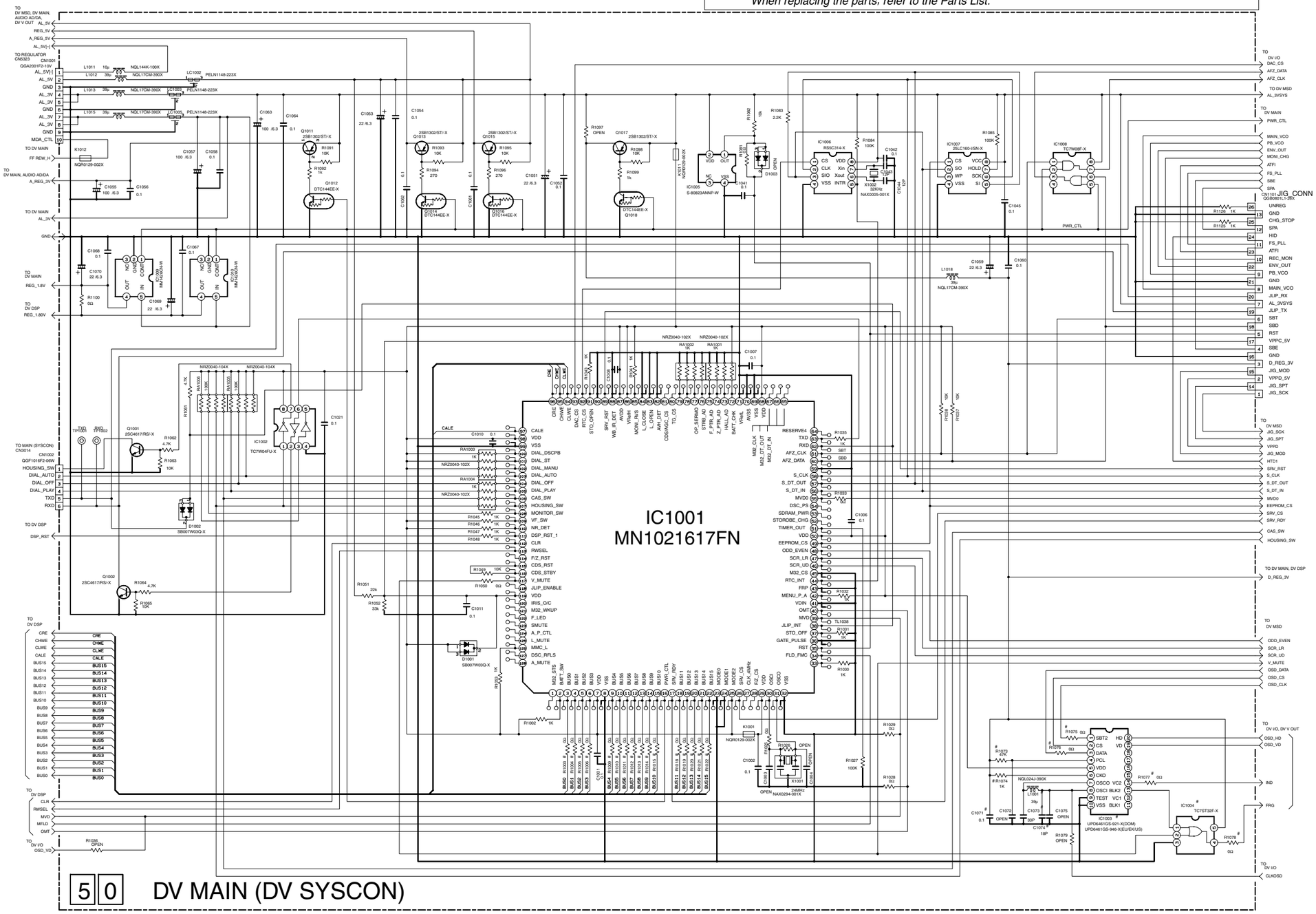
NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL DIODES ARE 1N4148M OR 1SS133
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

##:NOT USED

## 4.18 DV SYSTEM CONTROL SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*

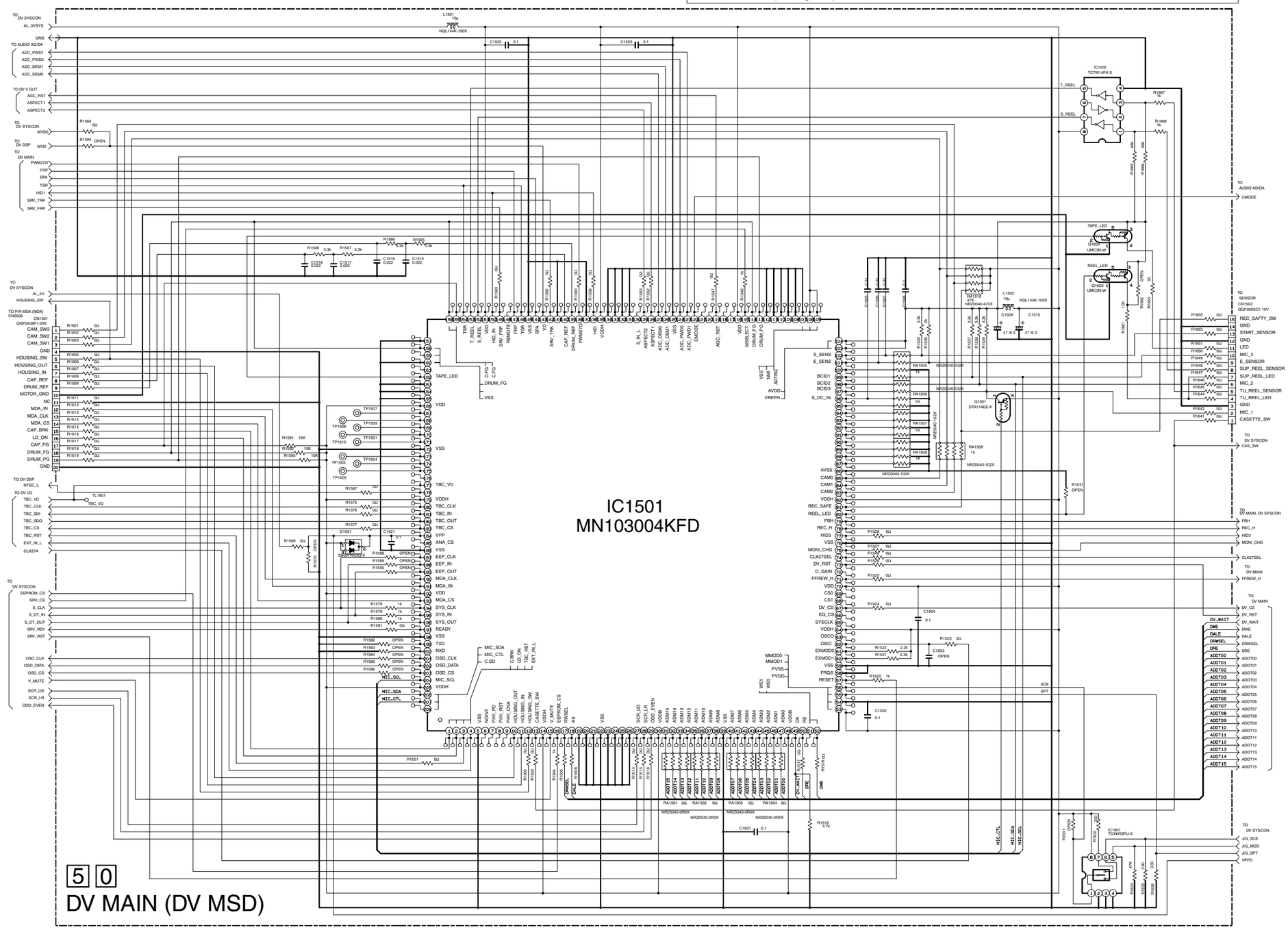



NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.19 DV MSD SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*




NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.20 DV MAIN SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*

IC2001
JCY0133

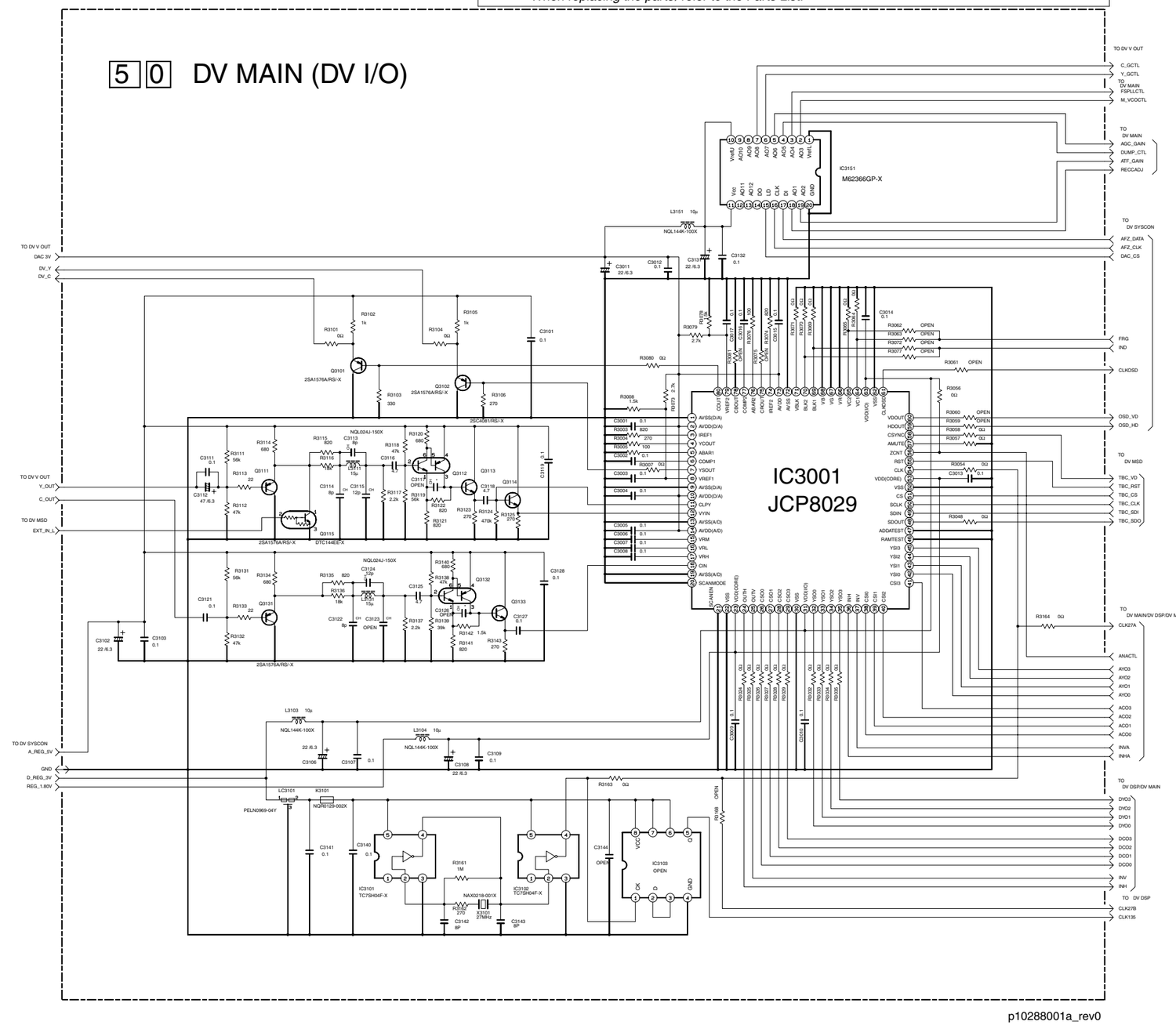
5 0 DV MAIN (DV MAIN)

p10287001a_rev0

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.21 DV I/O SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



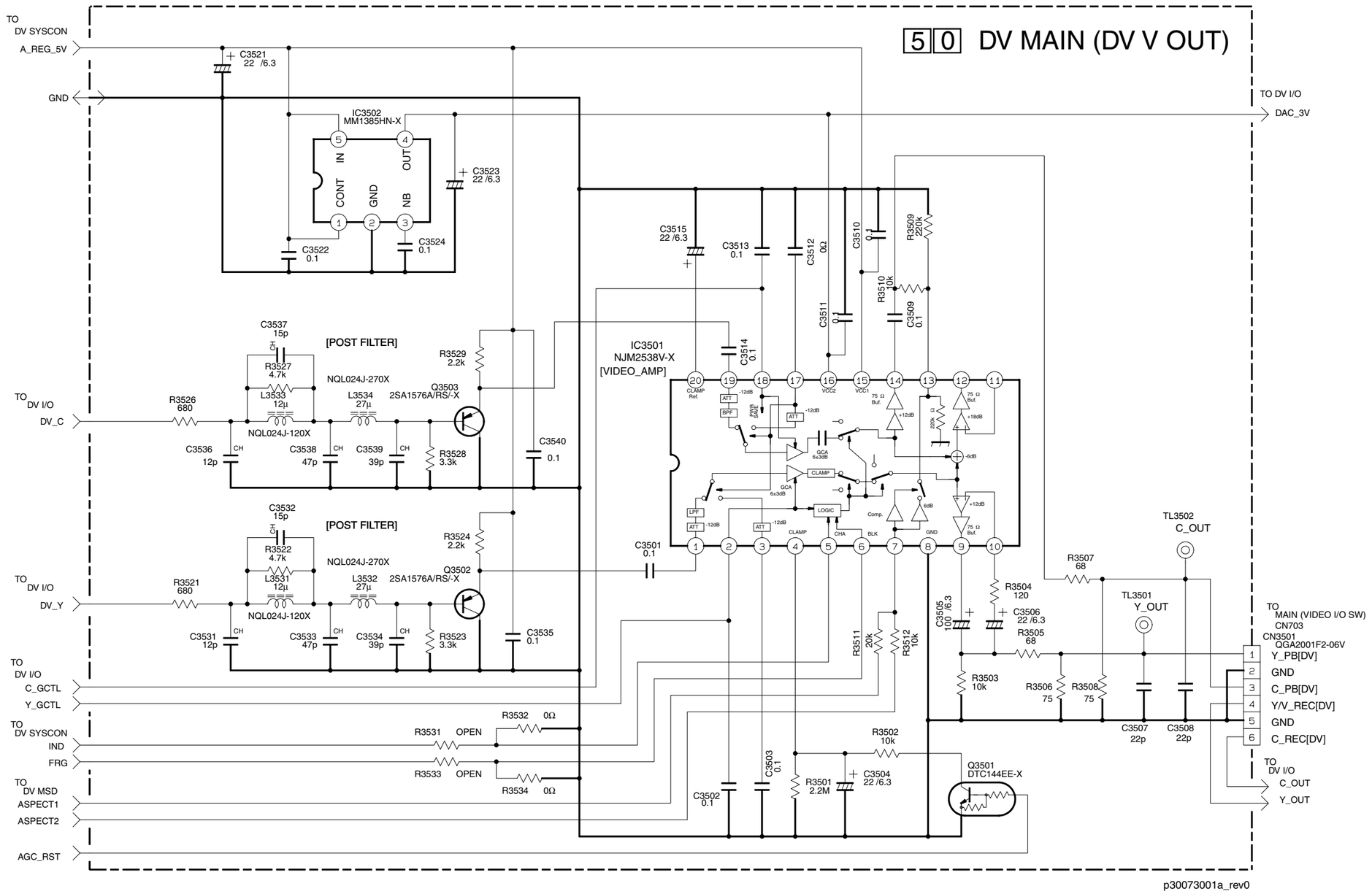

p10288001a_rev0

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.22 DV V OUT SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*

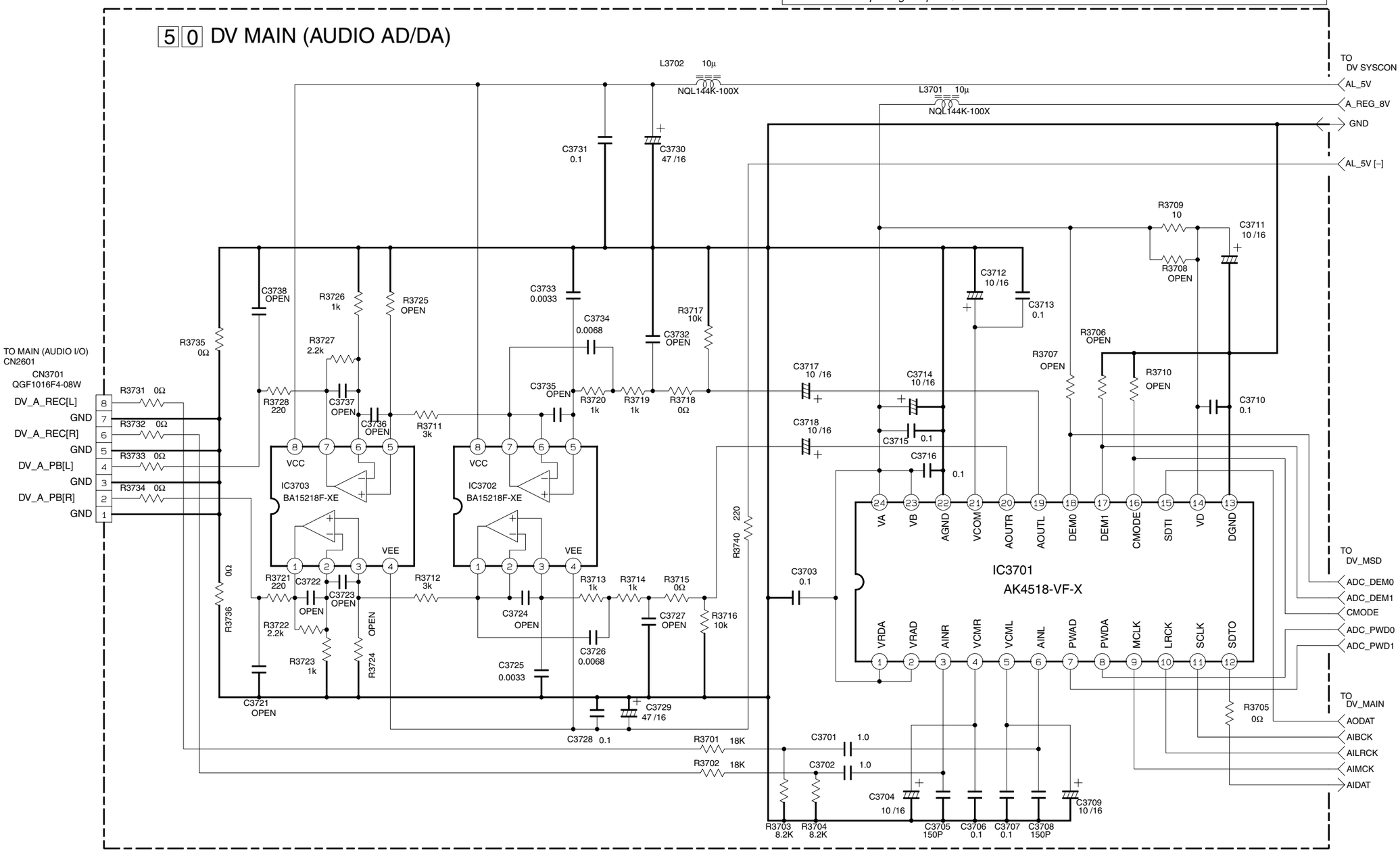



NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.23 AUDIO AD/DA SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*

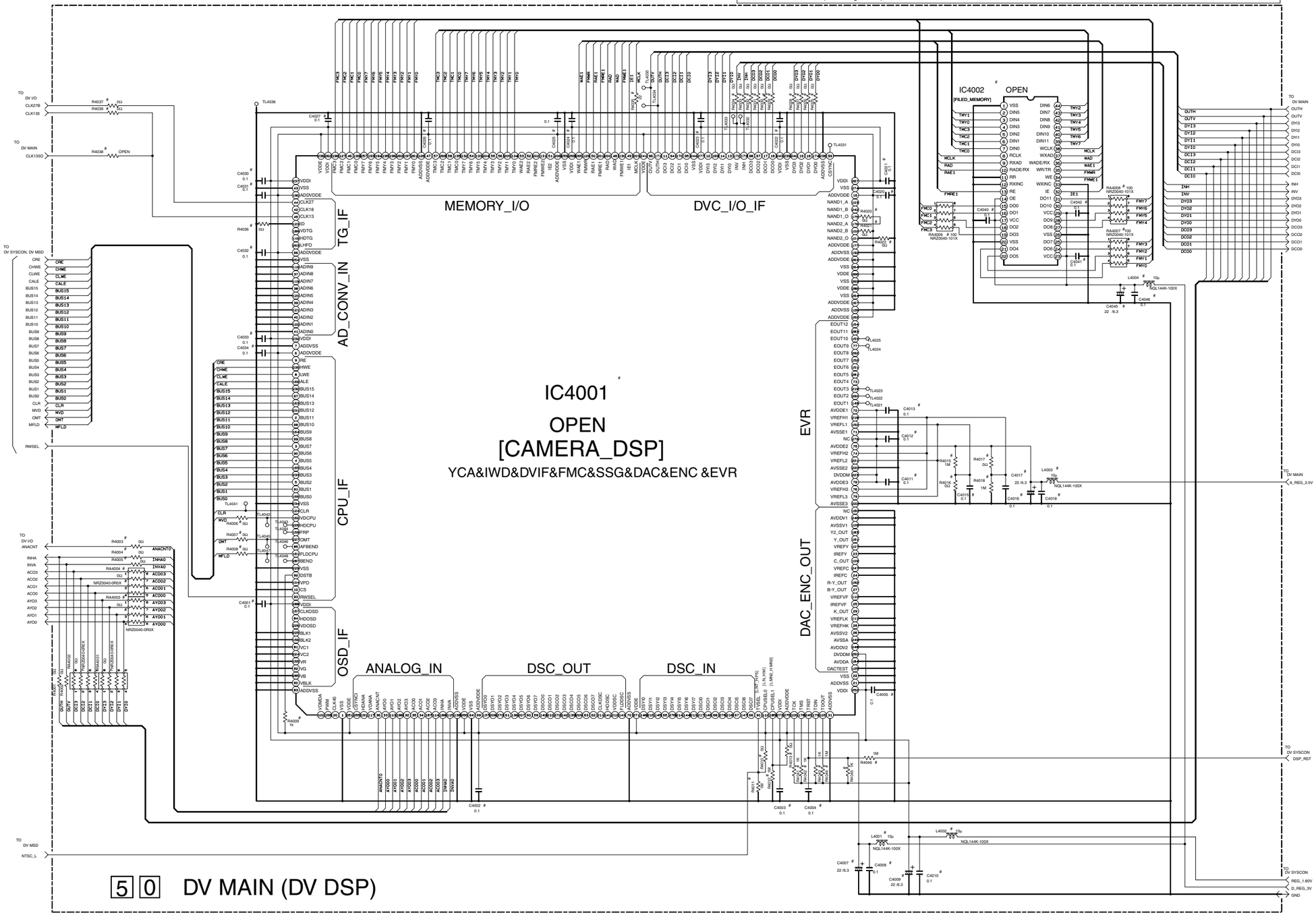



NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.24 DV DSP SCHEMATIC DIAGRAM

*Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*

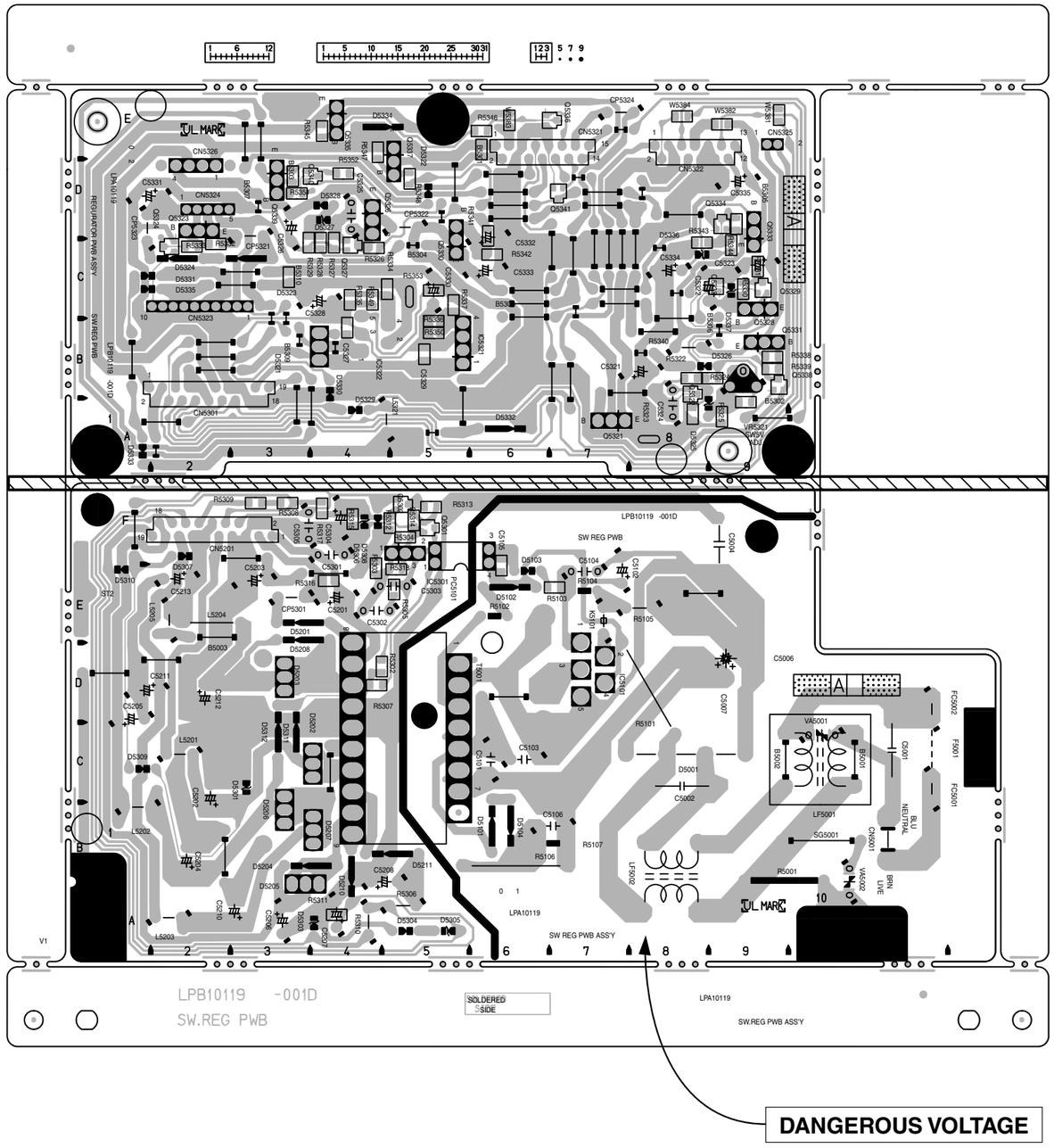



NOTES : UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

## 4.25 SWITCHING REGULATOR AND REGULATOR CIRCUIT BOARDS

### <01> SW REG, <02> REGULATOR
### LPB10119-001C




**COMPONENT PARTS LOCATION GUIDE <SWITCHING REGULATOR>**

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CAPACITOR** | | | |
| C5001 | A | D | 11D |
| C5002 | A | D | 8C |
| C5004 | A | D | 9E |
| C5006 | A | D | 8D |
| C5007 | A | D | 9D |
| C5101 | A | D | 6C |
| C5102 | A | D | 7E |
| C5103 | A | D | 6C |
| C5104 | A | D | 7E |
| C5105 | B | C | 6E |
| C5106 | A | D | 6B |
| C5201 | A | D | 4E |
| C5202 | A | D | 2B |
| C5203 | A | D | 3E |
| C5204 | A | D | 2B |
| C5205 | A | D | 1D |
| C5206 | A | D | 3A |
| C5207 | A | D | 4A |
| C5208 | A | D | 4B |
| C5210 | A | D | 3A |
| C5211 | A | D | 2D |
| C5212 | A | D | 2D |
| C5213 | A | D | 2E |
| C5301 | A | D | 4F |
| C5302 | A | D | 5E |
| C5303 | A | D | 5E |
| C5304 | A | D | 4F |
| C5305 | A | D | 3F |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CONNECTOR** | | | |
| CN5001 | A | D | 11B |
| CN5201 | A | D | 3F |
| **DIODE** | | | |
| D5001 | A | D | 7C |
| D5101 | A | D | 6B |
| D5102 | A | D | 6E |
| D5103 | A | D | 6E |
| D5104 | A | D | 6C |
| D5201 | A | D | 4E |
| D5202 | A | D | 4C |
| D5203 | A | D | 3D |
| D5204 | A | D | 4B |
| D5205 | A | D | 3A |
| D5206 | A | D | 3B |
| D5207 | A | D | 4B |
| D5208 | A | D | 4E |
| D5210 | A | D | 4B |
| D5211 | A | D | 5B |
| D5301 | A | D | 3C |
| D5303 | A | D | 4A |
| D5304 | A | D | 5A |
| D5305 | A | D | 5A |
| D5306 | A | D | 4F |
| D5307 | A | D | 2F |
| D5308 | A | D | 4F |
| D5309 | A | D | 1C |
| D5310 | A | D | 1E |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| D5311 | A | D | 3C |
| D5312 | A | D | 3C |
| **IC** | | | |
| IC5101 | A | D | 7E |
| IC5301 | A | D | 5F |
| **COIL** | | | |
| L5201 | A | D | 2C |
| L5202 | A | D | 2B |
| L5203 | A | D | 2A |
| L5204 | A | D | 3E |
| L5205 | A | D | 2E |
| **TRANSISTOR** | | | |
| Q5301 | B | C | 5F |
| Q5302 | B | C | 5F |
| **RESISTOR** | | | |
| R5001 | A | D | 9B |
| R5101 | A | D | 8C |
| R5102 | A | D | 6E |
| R5103 | B | C | 7E |
| R5104 | A | D | 7E |
| R5105 | A | D | 7E |
| R5106 | A | D | 5B |
| R5107 | A | D | 7B |
| R5302 | B | C | 4D |
| R5303 | B | C | 4E |
| R5304 | B | C | 5F |
| R5305 | B | C | 5E |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| R5306 | A | D | 5A |
| R5307 | B | C | 4D |
| R5308 | B | C | 3F |
| R5309 | B | C | 3F |
| R5310 | A | D | 4A |
| R5311 | B | C | 4A |
| R5312 | B | C | 5F |
| R5313 | B | C | 5F |
| R5314 | B | C | 5F |
| R5315 | B | C | 4F |
| R5316 | B | C | 4E |
| R5317 | B | C | 4F |
| R5318 | B | C | 5E |
| **OTHER** | | | |
| CP5301 | A | D | 3E |
| F5001 | A | D | 11C |
| FC5001 | A | D | 11C |
| FC5002 | A | D | 11D |
| K5101 | A | D | 7E |
| LF5001 | A | D | 10C |
| LF5002 | A | D | 8B |
| PC5101 | A | D | 5F |
| SG5001 | A | D | 9B |
| T5001 | A | D | 5D |
| VA5001 | A | D | 10C |
| VA5002 | A | D | 10A |

**COMPONENT PARTS LOCATION GUIDE <REGULATOR>**

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CAPACITOR** | | | |
| C5321 | A | D | 7B |
| C5322 | A | D | 9C |
| C5323 | A | D | 9C |
| C5324 | A | D | 8A |
| C5325 | A | D | 4D |
| C5326 | A | D | 3D |
| C5327 | B | C | 4B |
| C5328 | A | D | 3C |
| C5329 | B | C | 5B |
| C5330 | A | D | 5C |
| C5331 | A | D | 2D |
| C5332 | A | D | 6D |
| C5333 | A | D | 6C |
| C5334 | A | D | 8C |
| C5335 | A | D | 9D |
| **CONNECTOR** | | | |
| CN5301 | A | D | 1B |
| CN5321 | A | D | 6E |
| CN5322 | A | D | 8E |
| CN5323 | A | D | 3C |
| CN5324 | A | D | 2D |
| CN5325 | A | D | 9E |
| CN5326 | A | D | 2D |
| **DIODE** | | | |
| D5321 | A | D | 4B |
| D5322 | A | D | 5D |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| D5323 | A | D | 3C |
| D5324 | A | D | 2C |
| D5325 | A | D | 9B |
| D5326 | A | D | 9B |
| D5327 | A | D | 4D |
| D5328 | A | D | 4D |
| D5329 | A | D | 4A |
| D5330 | A | D | 4A |
| D5331 | A | D | 1C |
| D5332 | A | D | 6A |
| D5333 | A | D | 1A |
| D5334 | A | D | 4E |
| D5335 | A | D | 1C |
| D5336 | A | D | 8C |
| D5337 | A | D | 9C |
| **IC** | | | |
| IC5321 | A | D | 5B |
| IC5322 | A | D | 4B |
| **COIL** | | | |
| L5321 | A | D | 4A |
| **TRANSISTOR** | | | |
| Q5321 | A | D | 7A |
| Q5322 | B | C | 8B |
| Q5323 | A | D | 2D |
| Q5324 | B | C | 2C |
| Q5326 | A | D | 4D |
| Q5327 | B | C | 4C |

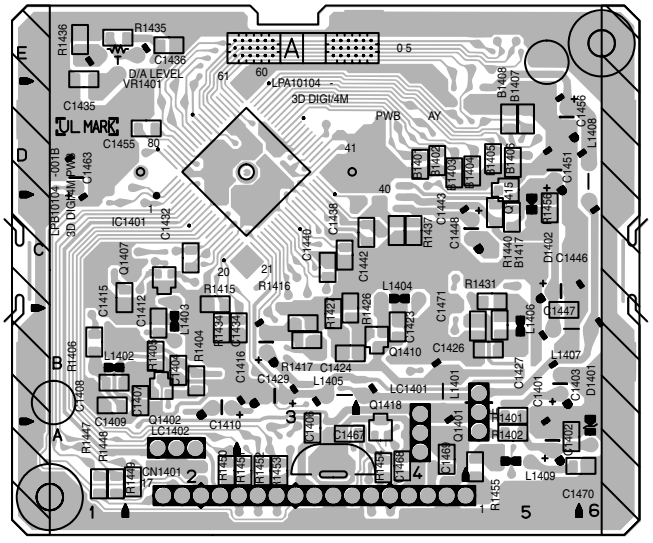
| REF.NO. | LOCATION | | |
|---|---|---|---|
| Q5328 | A | D | 9C |
| Q5329 | B | C | 9C |
| Q5330 | A | D | 5C |
| Q5331 | A | D | 9B |
| Q5332 | B | C | 9C |
| Q5333 | A | D | 9C |
| Q5334 | B | C | 9D |
| Q5335 | A | D | 4E |
| Q5336 | B | C | 7E |
| Q5337 | A | D | 5E |
| Q5338 | B | C | 9B |
| Q5339 | A | D | 3D |
| Q5340 | B | C | 4D |
| Q5341 | B | C | 7D |
| **RESISTOR** | | | |
| R5322 | B | C | 8B |
| R5323 | B | C | 8A |
| R5324 | B | C | 9B |
| R5325 | B | C | 9A |
| R5326 | B | C | 4C |
| R5327 | B | C | 4C |
| R5328 | B | C | 4C |
| R5329 | B | C | 3C |
| R5330 | B | C | 9C |
| R5331 | B | C | 9C |
| R5332 | B | C | 2C |
| R5333 | B | C | 2C |
| R5334 | B | C | 4C |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| R5335 | B | C | 4C |
| R5336 | B | C | 5B |
| R5337 | B | C | 5C |
| R5338 | B | C | 9B |
| R5339 | B | C | 9B |
| R5340 | A | D | 8B |
| R5341 | B | C | 6D |
| R5342 | B | C | 6C |
| R5343 | B | C | 8C |
| R5344 | B | C | 9C |
| R5345 | B | C | 4E |
| R5346 | B | C | 6E |
| R5347 | B | C | 4E |
| R5348 | B | C | 5D |
| R5349 | B | C | 4C |
| R5350 | B | C | 5B |
| R5351 | B | C | 3D |
| R5352 | B | C | 4D |
| R5353 | B | C | 5C |
| VR5321 | A | D | 9B |
| **OTHER** | | | |
| CP5321 | A | D | 3D |
| CP5322 | A | D | 5D |
| CP5323 | A | D | 1C |
| CP5324 | A | D | 8E |

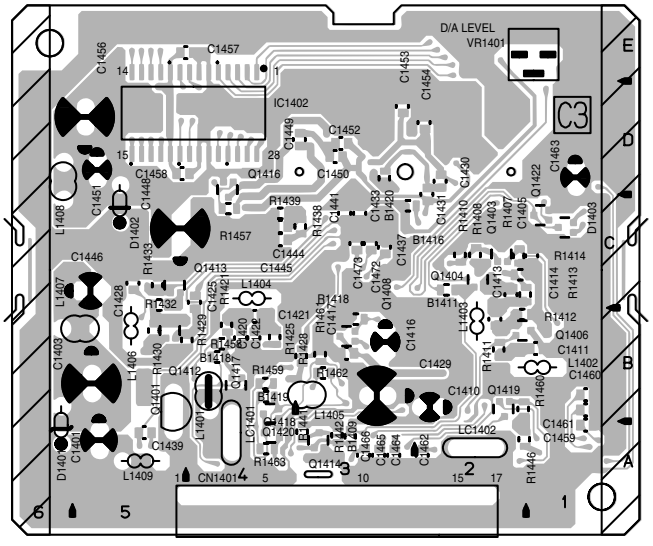
## 4.26 3D DIGITAL/4M IRCUIT BOARDS

### <05> 3D DIGITAL/4M
### LPB10104-001B

**– FOIL SIDE(B) –**



**– COMPONENT SIDE(A) –**

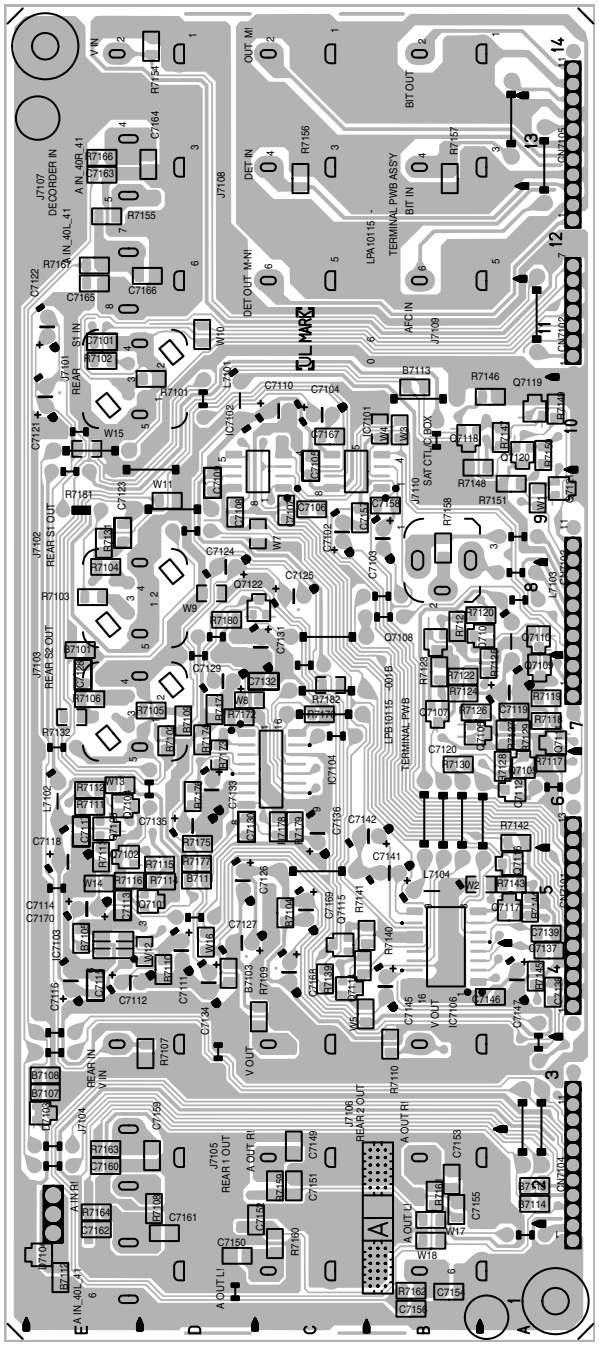


**COMPONENT PARTS LOCATION GUIDE <3D DIGITAL/4M>**

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CAPACITOR** | | | |
| C1401 | A | D | 5A |
| C1402 | B | C | 5A |
| C1403 | A | D | 5B |
| C1404 | B | C | 2B |
| C1405 | A | C | 1C |
| C1406 | B | C | 3A |
| C1407 | B | C | 2B |
| C1408 | B | C | 1B |
| C1409 | B | C | 1B |
| C1410 | A | D | 2B |
| C1411 | A | C | 1B |
| C1412 | B | C | 2B |
| C1413 | A | C | 2B |
| C1414 | A | C | 2C |
| C1415 | B | C | 1C |
| C1416 | A | D | 3B |
| C1417 | A | C | 3B |
| C1420 | A | C | 4B |
| C1421 | A | C | 4B |
| C1422 | A | C | 4B |
| C1423 | B | C | 4B |
| C1424 | B | C | 3B |
| C1425 | A | C | 4C |
| C1426 | B | C | 5B |
| C1427 | B | C | 5B |
| C1428 | A | C | 5C |
| C1429 | A | D | 3B |
| C1430 | A | C | 2D |
| C1431 | A | C | 2D |
| C1432 | B | C | 2C |
| C1433 | A | C | 3C |
| C1434 | B | C | 3B |
| C1435 | B | C | 1E |
| C1436 | B | C | 2E |
| C1437 | A | C | 3C |
| C1438 | B | C | 3C |
| C1439 | A | C | 5A |
| C1440 | B | C | 3C |
| C1441 | A | C | 3C |
| C1442 | B | C | 4C |
| C1443 | B | C | 4C |
| C1444 | A | C | 4C |
| C1445 | A | C | 4C |
| C1446 | A | D | 5C |
| C1447 | B | C | 5B |
| C1448 | A | D | 5C |
| C1449 | A | C | 4D |
| C1450 | A | C | 3D |
| C1451 | A | D | 5D |
| C1452 | A | C | 3D |
| C1453 | A | C | 3D |
| C1454 | A | C | 2D |
| C1455 | B | C | 2D |
| C1456 | A | D | 5D |
| C1457 | A | C | 5E |
| C1458 | A | C | 5D |
| C1459 | A | C | 1A |
| C1460 | A | C | 1B |
| C1461 | A | C | 1B |
| C1462 | A | C | 2A |
| C1463 | A | D | 1D |
| C1464 | A | C | 3A |
| C1465 | A | C | 3A |
| C1466 | A | C | 3A |
| C1467 | B | C | 3A |
| C1468 | B | C | 4A |
| C1469 | B | C | 4A |
| C1470 | B | C | 6A |
| C1471 | B | C | 5B |
| C1472 | A | C | 3C |
| C1473 | A | C | 3C |
| **CONNECTOR** | | | |
| CN1401 | A | D | 5A |
| **DIODE** | | | |
| D1401 | A | D | 6B |
| D1402 | A | D | 5D |
| D1403 | A | C | 1C |
| **IC** | | | |
| IC1401 | B | C | 3D |
| IC1402 | A | C | 4D |
| **COIL** | | | |
| L1401 | A | D | 4B |
| L1402 | A | D | 1B |
| L1403 | A | D | 2B |
| L1404 | A | D | 4C |
| L1405 | A | D | 4B |
| L1406 | A | D | 5B |
| L1407 | A | D | 6B |
| L1408 | A | D | 6C |
| L1409 | A | D | 5A |
| **TRANSISTOR** | | | |
| Q1401 | A | D | 5B |
| Q1402 | B | C | 2B |
| Q1403 | A | C | 2C |
| Q1404 | A | C | 2C |
| Q1406 | A | C | 2B |
| Q1407 | B | C | 2C |
| Q1408 | A | C | 3B |
| Q1410 | B | C | 4B |
| Q1412 | A | C | 5B |
| Q1413 | A | C | 5C |
| Q1414 | A | C | 3A |
| Q1415 | B | C | 5D |
| Q1416 | A | C | 4D |
| Q1417 | A | C | 4B |
| Q1418 | B | C | 4A |
| Q1419 | A | C | 2B |
| Q1420 | A | C | 4A |
| Q1421 | A | C | 4B |
| Q1422 | A | C | 1C |
| **RESISTOR** | | | |
| R1401 | B | C | 5B |
| R1402 | B | C | 5A |
| R1404 | B | C | 2B |
| R1405 | B | C | 2B |
| R1406 | B | C | 1B |
| R1407 | A | C | 2C |
| R1408 | A | C | 2C |
| R1410 | A | C | 2C |
| R1411 | A | C | 2B |
| R1412 | A | C | 2B |
| R1413 | A | C | 2C |
| R1414 | A | C | 2C |
| R1415 | B | C | 2C |
| R1416 | B | C | 3B |
| R1417 | B | C | 3B |
| R1418 | A | C | 3B |
| R1421 | A | C | 4B |
| R1425 | A | C | 4B |
| R1426 | B | C | 3C |
| R1427 | B | C | 3B |
| R1428 | A | C | 3B |
| R1429 | A | C | 4B |
| R1430 | A | C | 5B |
| R1431 | B | C | 5C |
| R1432 | A | C | 5C |
| R1433 | A | C | 5C |
| R1434 | B | C | 2B |
| R1435 | B | C | 1E |
| R1436 | B | C | 1E |
| R1437 | B | C | 4C |
| R1438 | A | C | 3C |
| R1439 | A | C | 4C |
| R1440 | B | C | 5C |
| R1441 | A | C | 3A |
| R1442 | A | C | 3A |
| R1446 | A | C | 2A |
| R1447 | B | C | 1A |
| R1448 | B | C | 1A |
| R1449 | B | C | 2A |
| R1450 | B | C | 2A |
| R1451 | B | C | 3A |
| R1452 | B | C | 3A |
| R1453 | B | C | 3A |
| R1454 | B | C | 4A |
| R1455 | B | C | 5A |
| R1456 | B | C | 5C |
| R1457 | A | C | 4C |
| R1458 | A | C | 4B |
| R1459 | A | C | 4B |
| R1460 | A | C | 2B |
| R1461 | A | C | 3B |
| R1462 | A | C | 3B |
| R1463 | A | C | 4A |
| VR1401 | A | D | 1E |
| **OTHER** | | | |
| LC1401 | A | D | 4A |
| LC1402 | A | D | 2A |

## 4.27 TERMINAL CIRCUIT BOARD

### <06> TERMINAL
### LPB10115-001B



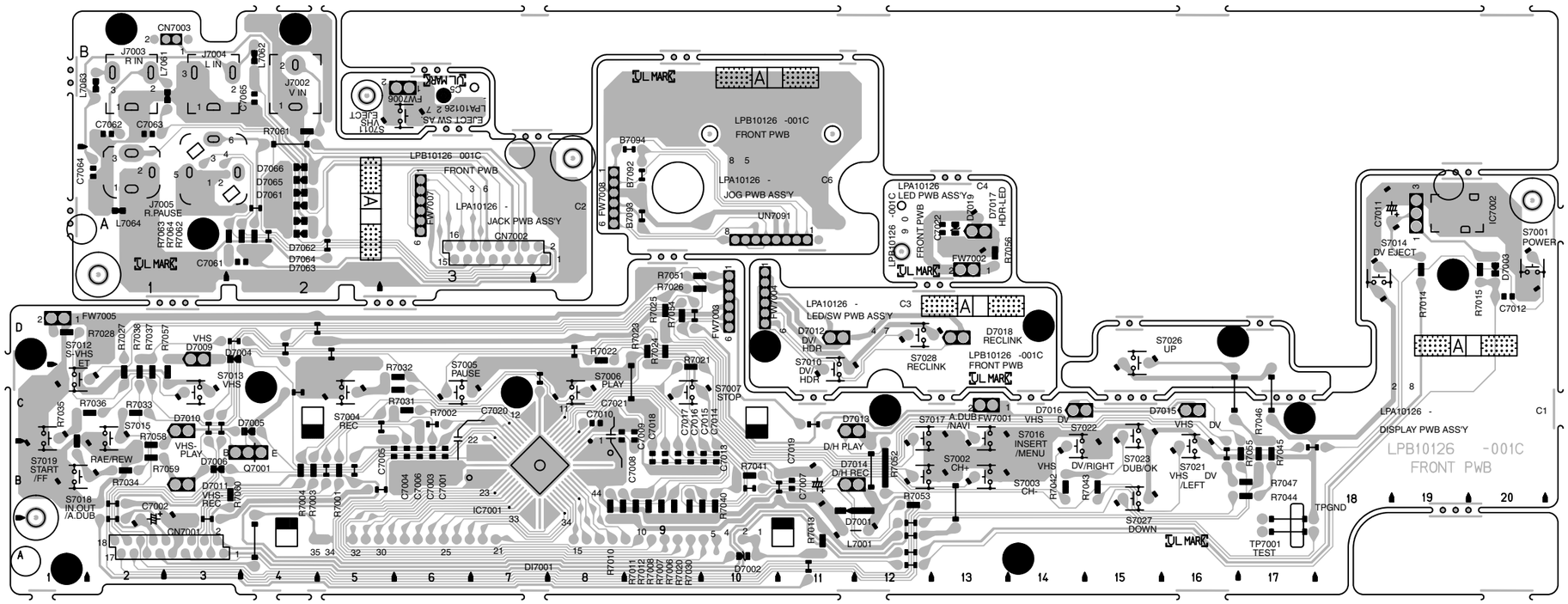
### COMPONENT PARTS LOCATION GUIDE
### <TERMINAL>

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CAPACITOR** | | | |
| C7101 | B | C | 10E |
| C7102 | A | D | 8C |
| C7103 | A | D | 8B |
| C7104 | A | D | 10C |
| C7105 | B | C | 9C |
| C7106 | B | C | 9C |
| C7107 | B | C | 9C |
| C7108 | B | C | 9D |
| C7109 | B | C | 9D |
| C7110 | A | D | 10C |
| C7111 | A | D | 4D |
| C7112 | A | D | 4E |
| C7113 | B | C | 5E |
| C7114 | A | D | 5E |
| C7115 | B | C | 4E |
| C7116 | A | D | 4E |
| C7117 | B | C | 5E |
| C7118 | A | D | 5E |
| C7119 | B | C | 7A |
| C7120 | A | D | 7A |
| C7121 | A | D | 10E |
| C7122 | A | D | 10E |
| C7123 | B | C | 8E |
| C7124 | A | D | 8D |
| C7125 | A | D | 8C |
| C7126 | A | D | 5D |
| C7127 | A | D | 4D |
| C7128 | B | C | 7E |
| C7129 | A | D | 7D |
| C7130 | B | C | 6D |
| C7131 | A | D | 7C |
| C7132 | B | C | 7C |
| C7133 | A | D | 6D |
| C7134 | A | D | 4D |
| C7135 | A | D | 6D |
| C7136 | A | D | 5C |
| C7137 | B | C | 4A |
| C7138 | B | C | 4A |
| C7139 | B | C | 4A |
| C7141 | A | D | 5B |
| C7142 | A | D | 5B |
| C7145 | A | D | 4B |
| C7146 | B | C | 4A |
| C7147 | A | D | 4A |
| C7149 | B | C | 2C |
| C7150 | B | C | 1D |
| C7151 | B | C | 2C |
| C7152 | B | C | 2C |
| C7153 | B | C | 2B |
| C7154 | B | C | 1B |
| C7155 | B | C | 2B |
| C7156 | B | C | 1B |
| C7157 | B | C | 9C |
| C7158 | B | C | 9B |
| C7159 | B | C | 2D |
| C7160 | B | C | 2E |
| C7161 | B | C | 2D |
| C7162 | B | C | 2E |
| C7163 | B | C | 12E |
| C7164 | B | C | 12D |
| C7165 | B | C | 11E |
| C7166 | B | C | 11D |
| C7167 | B | C | 9C |
| C7168 | A | D | 4C |
| C7169 | A | D | 5C |
| C7170 | A | D | 5E |

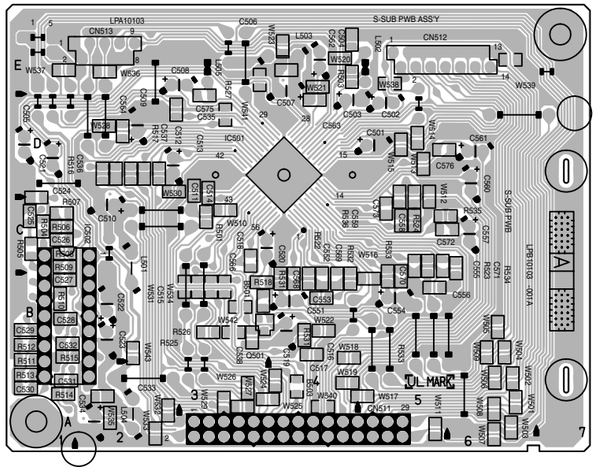
| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CONNECTOR** | | | |
| CN7101 | A | D | 4A |
| CN7102 | A | D | 10A |
| CN7103 | A | D | 7A |
| CN7104 | A | D | 1A |
| CN7105 | A | D | 11A |
| **DIODE** | | | |
| D7101 | B | C | 7A |
| D7103 | B | C | 3E |
| D7104 | B | C | 1E |
| **IC** | | | |
| IC7101 | B | C | 9C |
| IC7102 | B | C | 9C |
| IC7103 | B | C | 4E |
| IC7104 | B | C | 6C |
| IC7106 | B | C | 4B |
| **JACK** | | | |
| J7101 | A | D | 10E |
| J7102 | A | D | 8E |
| J7103 | A | D | 7E |
| J7104 | A | D | 2E |
| J7105 | A | D | 2C |
| J7106 | A | D | 2B |
| J7107 | A | D | 12E |
| J7108 | A | D | 12C |
| J7109 | A | D | 12B |
| J7110 | A | D | 8B |
| **COIL** | | | |
| L7101 | A | D | 10D |
| L7102 | A | D | 6E |
| L7103 | A | D | 8A |
| L7104 | A | D | 5B |
| **TRANSISTOR** | | | |
| Q7101 | B | C | 5D |
| Q7102 | B | C | 5E |
| Q7103 | B | C | 6E |
| Q7104 | B | C | 6E |
| Q7105 | B | C | 6A |
| Q7106 | B | C | 6B |
| Q7107 | B | C | 7B |
| Q7108 | B | C | 7B |
| Q7109 | B | C | 7A |
| Q7110 | B | C | 7A |
| Q7111 | B | C | 6A |
| Q7112 | B | C | 6A |
| Q7114 | B | C | 4C |
| Q7115 | B | C | 4C |
| Q7116 | B | C | 5A |
| Q7117 | B | C | 5A |
| Q7118 | B | C | 9B |
| Q7119 | B | C | 10A |
| Q7120 | B | C | 9A |
| Q7121 | B | C | 9A |
| Q7122 | B | C | 8C |
| **RESISTOR** | | | |
| R7101 | B | C | 10D |
| R7102 | B | C | 10E |
| R7103 | B | C | 8E |
| R7104 | B | C | 8E |
| R7105 | B | C | 7D |
| R7106 | B | C | 7E |
| R7107 | B | C | 3D |
| R7108 | B | C | 2D |
| R7109 | B | C | 4C |
| R7110 | B | C | 3B |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| R7111 | B | C | 6E |
| R7112 | B | C | 6E |
| R7113 | B | C | 5E |
| R7114 | B | C | 5D |
| R7115 | B | C | 5D |
| R7116 | B | C | 5E |
| R7117 | B | C | 6A |
| R7118 | B | C | 7A |
| R7119 | B | C | 7A |
| R7120 | B | C | 8A |
| R7121 | B | C | 7B |
| R7122 | B | C | 7B |
| R7123 | B | C | 7B |
| R7124 | B | C | 7B |
| R7125 | B | C | 7A |
| R7126 | B | C | 7B |
| R7127 | B | C | 6A |
| R7128 | B | C | 6A |
| R7129 | B | C | 6A |
| R7130 | B | C | 6B |
| R7131 | B | C | 8E |
| R7132 | B | C | 7E |
| R7139 | B | C | 4C |
| R7140 | B | C | 4C |
| R7141 | B | C | 4C |
| R7142 | B | C | 5A |
| R7143 | B | C | 5A |
| R7144 | B | C | 5A |
| R7145 | B | C | 4A |
| R7146 | B | C | 10A |
| R7147 | B | C | 9A |
| R7148 | B | C | 9B |
| R7149 | B | C | 10A |
| R7150 | B | C | 9A |
| R7151 | B | C | 9A |
| R7154 | B | C | 13D |
| R7155 | B | C | 12E |
| R7156 | B | C | 12C |
| R7157 | B | C | 12B |
| R7158 | B | C | 8B |
| R7159 | B | C | 2C |
| R7160 | B | C | 1C |
| R7161 | B | C | 2B |
| R7162 | B | C | 1B |
| R7163 | B | C | 2E |
| R7164 | B | C | 2E |
| R7166 | B | C | 12E |
| R7167 | B | C | 11E |
| R7170 | B | C | 7C |
| R7171 | B | C | 7D |
| R7172 | B | C | 7D |
| R7173 | B | C | 6D |
| R7174 | B | C | 6D |
| R7175 | B | C | 5D |
| R7176 | B | C | 6D |
| R7177 | B | C | 5D |
| R7178 | B | C | 6C |
| R7179 | B | C | 6C |
| R7180 | B | C | 8D |
| R7181 | A | D | 9E |
| R7182 | B | C | 7C |

**<27> EJECT SW, <28> DISPLAY, <36> JACK, <47> LED/SW, <85> JOG**
**LPB10126-001C**




**<15> S-SUB**
**LPB10103-001A**

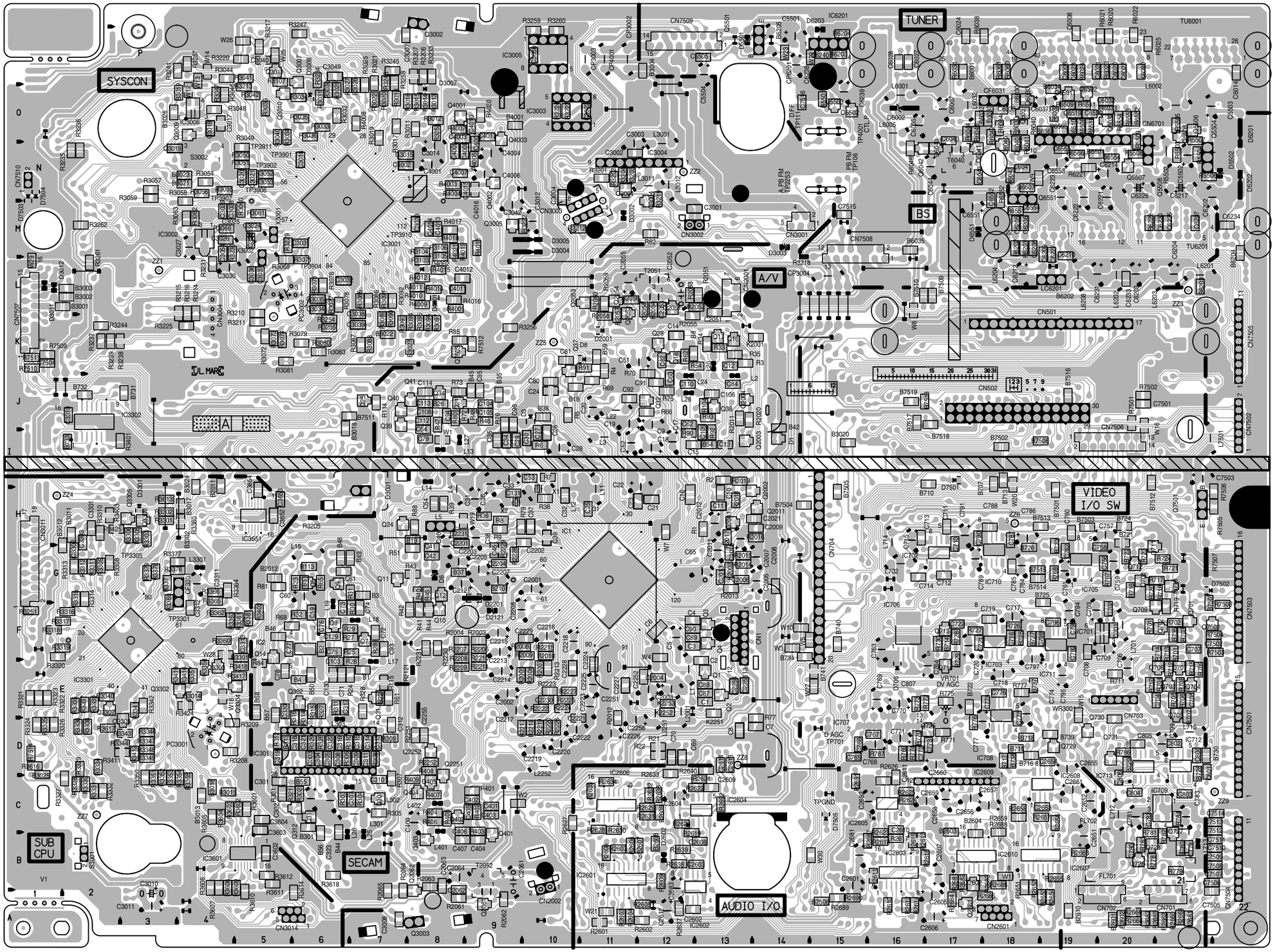



**COPMONENT PARTS LOCATION GUIDE <S-SUB>**

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CAPACITOR** | | | |
| C501 | A | D | 5D |
| C502 | A | D | 5D |
| C503 | A | D | 4D |
| C504 | B | C | 4E |
| C505 | A | D | 1D |
| C506 | B | C | 4E |
| C507 | A | D | 4E |
| C508 | A | D | 2E |
| C509 | A | D | 2D |
| C510 | A | D | 2C |
| C511 | B | C | 3C |
| C512 | B | C | 2D |
| C513 | A | D | 2D |
| C514 | B | C | 3C |
| C515 | B | C | 3B |
| C516 | B | C | 4B |
| C517 | B | C | 4B |
| C518 | B | C | 3C |
| C519 | A | D | 4B |
| C520 | A | D | 3C |
| C521 | A | D | 1D |
| C522 | A | D | 2B |
| C523 | A | D | 2B |
| C524 | B | C | 1C |
| C525 | B | C | 1C |
| C526 | B | C | 1C |
| C527 | B | C | 1B |
| C528 | B | C | 1B |
| C529 | B | C | 1B |
| C530 | B | C | 1A |
| C531 | B | C | 1A |
| C532 | B | C | 1B |
| C533 | B | C | 2A |
| C534 | A | D | 2A |
| C535 | B | C | 2D |
| C536 | B | C | 2D |
| C537 | B | C | 2D |
| C538 | B | C | 3B |
| C551 | A | D | 4B |
| C552 | B | C | 4B |
| C553 | B | C | 4B |
| C554 | A | D | 5B |
| C555 | B | C | 5C |
| C556 | B | C | 5B |
| C557 | A | D | 6C |
| C558 | B | C | 5C |
| C559 | B | C | 5C |
| C560 | A | D | 6D |
| C561 | A | D | 6D |
| C562 | A | D | 4E |
| C563 | B | C | 4D |
| C564 | B | C | 2D |
| C566 | B | C | 3B |
| C568 | B | C | 4B |
| C569 | B | C | 4B |
| C570 | B | C | 5B |
| C571 | B | C | 5C |
| C572 | B | C | 6C |
| C573 | B | C | 5C |
| C575 | B | C | 3D |
| C576 | B | C | 5D |
| **CONNECTOR** | | | |
| CN511 | A | D | 3A |
| CN512 | A | D | 5E |
| CN513 | A | D | 1E |
| **IC** | | | |
| IC501 | B | C | 4D |
| IC502 | A | D | 1C |
| **COIL** | | | |
| L501 | A | D | 2B |
| L502 | A | D | 5E |
| L503 | A | D | 3E |
| L504 | A | D | 2A |
| L505 | A | D | 3E |
| **TRANSISTOR** | | | |
| Q501 | B | C | 3B |
| **RESISTOR** | | | |
| R501 | B | C | 3C |
| R503 | B | C | 4E |
| R504 | B | C | 1C |
| R505 | B | C | 1C |
| R506 | B | C | 1C |
| R507 | B | C | 1C |
| R508 | B | C | 1C |
| R509 | B | C | 1C |
| R510 | B | C | 1B |
| R511 | B | C | 1B |
| R512 | B | C | 1B |
| R513 | B | C | 1A |
| R514 | B | C | 1A |
| R515 | B | C | 1B |
| R516 | B | C | 2D |
| R517 | B | C | 2D |
| R518 | B | C | 3B |
| R522 | B | C | 4B |
| R523 | B | C | 5C |
| R524 | B | C | 5C |
| R525 | B | C | 3B |
| R526 | B | C | 3B |
| R527 | B | C | 3D |
| R531 | B | C | 4B |
| R532 | B | C | 4B |
| R533 | B | C | 5B |
| R534 | B | C | 6C |
| R535 | B | C | 5C |
| R536 | B | C | 5C |

## 4.29 MAIN CIRCUIT BOARD

**<03> MAIN**
**LPB10113-001D**



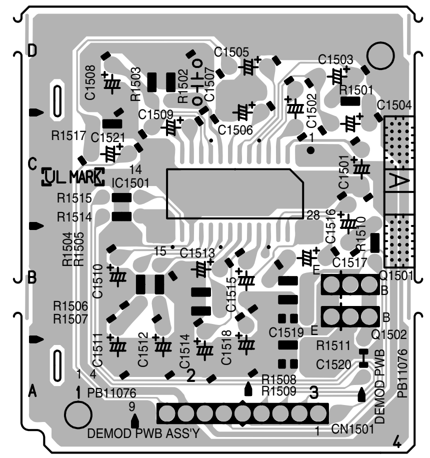
## COMPONENT PARTS LOCATION GUIDE <MAIN>

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CAPACITOR** | | | |
| C1 | B | C | 13E |
| C2 | B | C | 13E |
| C3 | B | C | 12F |
| C4 | B | C | 12F |
| C5 | A | D | 12F |
| C6 | B | C | 12F |
| C7 | B | C | 14D |
| C8 | B | C | 13D |
| C9 | A | D | 12J |
| C10 | B | C | 13H |
| C11 | B | C | 13H |
| C12 | B | C | 13K |
| C13 | B | C | 13I |
| C14 | B | C | 12K |
| C15 | B | C | 12I |
| C16 | B | C | 12H |
| C17 | A | D | 12I |
| C18 | A | D | 12I |
| C19 | A | D | 11J |
| C20 | A | D | 11J |
| C21 | B | C | 12H |
| C22 | A | D | 11I |
| C23 | B | C | 12H |
| C24 | B | C | 10J |
| C25 | B | C | 11H |
| C26 | B | C | 10I |
| C27 | B | C | 10I |
| C28 | A | D | 10I |
| C29 | B | C | 9I |
| C30 | B | C | 10I |
| C31 | A | D | 9H |
| C32 | B | C | 10H |
| C33 | A | D | 9I |
| C34 | B | C | 9I |
| C35 | B | C | 9I |
| C36 | A | D | 9H |
| C37 | B | C | 10H |
| C38 | A | D | 9H |
| C39 | B | C | 10H |
| C40 | A | D | 8H |
| C41 | B | C | 8G |
| C42 | B | C | 8G |
| C45 | B | C | 9G |
| C51 | A | D | 12K |
| C52 | A | D | 11I |
| C53 | B | C | 10I |
| C54 | B | C | 8H |
| C59 | B | C | 6F |
| C60 | A | D | 6G |
| C61 | B | C | 6G |
| C62 | B | C | 12J |
| C63 | B | C | 12J |
| C64 | B | C | 8J |
| C65 | A | D | 13G |
| C69 | B | C | 12D |
| C70 | B | C | 12D |
| C71 | B | C | 6E |
| C72 | B | C | 7F |
| C73 | B | C | 6F |
| C74 | B | C | 7F |
| C75 | B | C | 6F |
| C76 | B | C | 6F |
| C77 | B | C | 5F |
| C78 | B | C | 5E |
| C79 | B | C | 8I |
| C80 | B | C | 10J |
| C81 | B | C | 10K |
| C82 | B | C | 12K |
| C84 | B | C | 13J |
| C87 | B | C | 13E |
| C88 | B | C | 13E |
| C89 | B | C | 12F |
| C90 | B | C | 12F |
| C91 | B | C | 12J |
| C92 | B | C | 11J |
| C93 | B | C | 7F |
| C94 | B | C | 8J |
| C95 | B | C | 9J |
| C96 | B | C | 9J |
| C103 | B | C | 6E |
| C104 | B | C | 9J |
| C105 | B | C | 9J |
| C106 | B | C | 13J |
| C108 | B | C | 8J |
| C109 | B | C | 13I |
| C110 | B | C | 12J |
| C112 | B | C | 8J |
| C113 | B | C | 8J |
| C114 | B | C | 8J |
| C129 | B | C | 6F |
| C130 | B | C | 6E |
| C131 | B | C | 9H |
| C301 | B | C | 5C |
| C302 | A | D | 6C |
| C303 | B | C | 6D |
| C304 | B | C | 6D |
| C305 | B | C | 6D |
| C307 | B | C | 7C |
| C308 | B | C | 6D |
| C309 | B | C | 7D |
| C310 | B | C | 7C |
| C311 | B | C | 7D |
| C312 | B | C | 7D |
| C313 | B | C | 7D |
| C314 | B | C | 7D |
| C315 | B | C | 7D |
| C316 | B | C | 6D |
| C317 | B | C | 6E |
| C318 | B | C | 6D |
| C319 | B | C | 5D |
| C320 | B | C | 5E |
| C321 | B | C | 6D |
| C322 | B | C | 6D |
| C323 | A | D | 6C |
| C401 | B | C | 9C |
| C402 | B | C | 9C |
| C403 | B | C | 9C |
| C404 | B | C | 9B |
| C405 | B | C | 9C |
| C406 | B | C | 8C |
| C407 | B | C | 8B |
| C409 | A | D | 8C |
| C701 | B | C | 20F |
| C702 | B | C | 20F |
| C703 | A | D | 19F |
| C704 | B | C | 21E |
| C705 | B | C | 21E |
| C706 | A | D | 20E |
| C707 | B | C | 21F |
| C708 | B | C | 19F |
| C709 | A | D | 20F |
| C710 | B | C | 17H |
| C711 | B | C | 17H |
| C712 | B | C | 17G |
| C713 | B | C | 16H |
| C714 | B | C | 16G |
| C715 | A | D | 16H |
| C716 | B | C | 18F |
| C717 | A | D | 18F |
| C718 | A | D | 18E |
| C719 | B | C | 18F |
| C720 | A | D | 17F |
| C721 | B | C | 17F |
| C722 | B | C | 17F |
| C756 | B | C | 20G |
| C757 | A | D | 20H |
| C758 | B | C | 20G |
| C759 | A | D | 20G |
| C760 | B | C | 19H |
| C761 | A | D | 19G |
| C762 | B | C | 19G |
| C763 | A | D | 16F |
| C764 | A | D | 17E |
| C765 | B | C | 15D |
| C766 | B | C | 15D |
| C767 | B | C | 16D |
| C768 | A | D | 16D |
| C769 | A | D | 16E |
| C770 | A | D | 16E |
| C771 | A | D | 16D |
| C772 | B | C | 16D |
| C773 | B | C | 17D |
| C774 | A | D | 18D |
| C775 | B | C | 18D |
| C776 | B | C | 18E |
| C777 | A | D | 18E |
| C778 | B | C | 18E |
| C779 | B | C | 21B |
| C780 | B | C | 20B |
| C781 | A | D | 20C |
| C782 | B | C | 20C |
| C783 | A | D | 21C |
| C784 | A | D | 18G |
| C785 | B | C | 18G |
| C786 | A | D | 18H |
| C787 | B | C | 18H |
| C788 | B | C | 18H |
| C789 | A | D | 17G |
| C790 | B | C | 17H |
| C791 | A | D | 17H |
| C792 | B | C | 19F |
| C793 | B | C | 19F |
| C794 | A | D | 19F |
| C795 | A | D | 19E |
| C796 | B | C | 19F |
| C797 | A | D | 18F |
| C798 | B | C | 19F |
| C799 | A | D | 21D |
| C800 | B | C | 21D |
| C801 | B | C | 21D |
| C802 | B | C | 21D |
| C803 | B | C | 21C |
| C804 | B | C | 20C |
| C805 | B | C | 20D |
| C806 | B | C | 20C |
| C807 | A | D | 16E |
| C2001 | A | D | 10G |
| C2002 | A | D | 9E |
| C2003 | A | D | 12E |
| C2004 | B | C | 12E |
| C2005 | A | D | 14G |
| C2006 | B | C | 13G |
| C2007 | A | D | 14G |
| C2008 | A | D | 13H |
| C2009 | B | C | 14H |
| C2010 | B | C | 13G |
| C2011 | A | D | 13G |
| C2012 | A | D | 13H |
| C2013 | B | C | 13G |
| C2021 | B | C | 14H |
| C2051 | B | C | 13L |
| C2052 | A | D | 12L |
| C2053 | B | C | 12L |
| C2054 | B | C | 12L |
| C2055 | A | D | 11L |
| C2061 | A | D | 9B |
| C2062 | B | C | 8B |
| C2063 | B | C | 8B |
| C2064 | A | D | 8B |
| C2121 | A | D | 9G |
| C2201 | B | C | 8H |
| C2202 | B | C | 10H |
| C2203 | A | D | 8G |
| C2204 | B | C | 9G |
| C2205 | A | D | 9G |
| C2207 | A | D | 9G |
| C2208 | A | D | 9F |
| C2213 | A | D | 9F |
| C2214 | A | D | 9E |
| C2215 | A | D | 9F |
| C2216 | A | D | 10F |
| C2217 | A | D | 9E |
| C2218 | A | D | 10F |
| C2219 | A | D | 10D |
| C2220 | A | D | 10D |
| C2221 | B | C | 10D |
| C2222 | A | D | 10D |
| C2223 | A | D | 11E |
| C2224 | B | C | 11E |
| C2225 | A | D | 11E |
| C2226 | A | D | 11D |
| C2227 | B | C | 11E |
| C2228 | B | C | 10E |
| C2229 | B | C | 10F |
| C2230 | B | C | 10E |
| C2231 | B | C | 8H |
| C2251 | A | D | 12E |
| C2252 | B | C | 12E |
| C2253 | B | C | 13E |
| C2254 | B | C | 13E |
| C2255 | B | C | 8D |
| C2256 | A | D | 12D |
| C2601 | A | D | 15B |
| C2602 | B | C | 12A |
| C2603 | B | C | 13B |
| C2604 | A | D | 12C |
| C2605 | A | D | 17A |
| C2606 | A | D | 17A |
| C2607 | A | D | 17B |
| C2608 | B | C | 13B |
| C2609 | B | C | 13C |
| C2610 | B | C | 16C |
| C2611 | B | C | 16C |
| C2612 | A | D | 12A |
| C2613 | B | C | 13D |
| C2614 | B | C | 13D |
| C2651 | A | D | 19B |
| C2652 | A | D | 19C |
| C2653 | B | C | 19C |
| C2654 | B | C | 19D |
| C2655 | A | D | 19D |
| C2656 | A | D | 18C |
| C2657 | A | D | 17C |
| C2658 | A | D | 17C |
| C2659 | A | D | 16C |
| C2660 | A | D | 17D |
| C2661 | A | D | 19C |
| C2681 | A | D | 15B |
| C2682 | A | D | 16C |
| C2683 | A | D | 12B |
| C3001 | B | C | 13M |
| C3002 | B | C | 11N |
| C3003 | A | D | 12N |
| C3004 | B | C | 10N |
| C3007 | B | C | 7P |
| C3008 | B | C | 7A |
| C3010 | A | D | 3A |
| C3011 | A | D | 3A |
| C3012 | A | D | 10M |
| C3014 | A | D | 8N |
| C3015 | B | C | 7N |
| C3016 | B | C | 6N |
| C3017 | B | C | 4O |
| C3018 | B | C | 4O |
| C3019 | B | C | 3N |
| C3020 | B | C | 5N |
| C3021 | B | C | 5N |
| C3022 | B | C | 11O |
| C3024 | B | C | 5M |
| C3025 | A | D | 5M |
| C3026 | B | C | 4M |
| C3027 | A | D | 4M |
| C3028 | B | C | 4M |
| C3029 | B | C | 4M |
| C3030 | A | D | 4L |
| C3031 | B | C | 6M |
| C3032 | B | C | 6L |
| C3033 | B | C | 8M |
| C3034 | B | C | 6L |
| C3035 | B | C | 6L |
| C3036 | B | C | 5L |
| C3037 | B | C | 5L |
| C3038 | B | C | 7L |
| C3039 | B | C | 7K |
| C3040 | B | C | 5P |
| C3041 | B | C | 5M |
| C3042 | A | D | 9M |
| C3049 | B | C | 6P |
| C3050 | B | C | 10P |
| C3054 | B | C | 4M |
| C3301 | B | C | 2H |
| C3302 | B | C | 2G |
| C3303 | B | C | 2H |
| C3310 | B | C | 2J |
| C3311 | A | D | 4G |
| C3312 | B | C | 4F |
| C3313 | B | C | 5F |
| C3602 | B | C | 5B |
| C3603 | B | C | 5C |
| C3604 | B | C | 5C |
| C3652 | B | C | 5H |
| C3653 | B | C | 5H |
| C3654 | B | C | 5H |
| C4001 | A | D | 8N |
| C4002 | B | C | 7N |
| C4003 | B | C | 8O |
| C4004 | A | D | 9N |
| C4005 | B | C | 9N |
| C4006 | A | D | 9N |
| C4007 | B | C | 8N |
| C4008 | B | C | 9N |
| C4009 | B | C | 8N |
| C4010 | B | C | 9O |
| C4011 | B | C | 8L |
| C4012 | B | C | 8L |
| C4013 | B | C | 8M |
| C4014 | B | C | 8M |
| C4015 | B | C | 9N |
| C4016 | B | C | 9N |
| C4017 | B | C | 9O |
| C5501 | A | D | 14P |
| C5502 | A | D | 21N |
| C5503 | A | D | 21O |
| C5504 | A | D | 13P |
| C5505 | B | C | 13P |
| C6005 | A | D | 16O |
| C6006 | B | C | 19P |
| C6007 | A | D | 17O |
| C6008 | B | C | 19P |
| C6014 | B | C | 22P |
| C6020 | B | C | 20P |
| C6021 | B | C | 19P |
| C6022 | B | C | 20P |
| C6023 | B | C | 19P |
| C6024 | B | C | 17P |
| C6027 | B | C | 16P |
| C6028 | B | C | 16P |
| C6032 | B | C | 20O |
| C6033 | B | C | 18O |
| C6037 | A | D | 19O |
| C6040 | B | C | 18N |
| C6041 | B | C | 18N |
| C6042 | B | C | 17N |
| C6043 | B | C | 17O |
| C6044 | A | D | 17N |
| C6202 | A | D | 22M |
| C6203 | A | D | 20L |
| C6204 | A | D | 21L |
| C6205 | B | C | 18M |
| C6206 | B | C | 18M |
| C6207 | B | C | 21M |
| C6208 | B | C | 18M |
| C6209 | B | C | 19M |
| C6210 | B | C | 19M |
| C6212 | A | D | 18L |
| C6214 | A | D | 20N |
| C6217 | A | D | 21N |
| C6221 | A | D | 20N |
| C6222 | A | D | 19M |
| C6223 | A | D | 19N |
| C6227 | B | C | 19M |
| C6228 | A | D | 20N |
| C6230 | B | C | 21M |
| C6231 | A | D | 20L |
| C6233 | B | C | 20L |
| C6234 | B | C | 22M |
| C6235 | B | C | 21M |
| C6238 | A | D | 14P |
| C6239 | A | D | 15O |
| C6240 | B | C | 15P |
| C6519 | B | C | 19O |
| C6520 | B | C | 19O |
| C6551 | A | D | 17M |
| C6552 | B | C | 18M |
| C6553 | A | D | 19N |
| C6554 | B | C | 18M |
| C6555 | B | C | 19N |
| C7501 | B | C | 20J |
| C7502 | B | C | 22F |
| C7503 | A | D | 21I |
| C7504 | B | C | 1K |
| C7505 | B | C | 21A |
| C7506 | B | C | 21B |
| C7507 | B | C | 22B |
| C7508 | B | C | 22B |
| C7509 | B | C | 22B |
| C7510 | B | C | 22B |
| C7511 | B | C | 22B |
| C7512 | B | C | 22C |
| C7513 | B | C | 22C |
| C7514 | B | C | 22C |
| C7515 | B | C | 15M |
| C7516 | B | C | 14O |
| **CONNECTOR** | | | |
| CN1 | A | D | 13F |
| CN501 | A | D | 17K |
| CN502 | A | D | 17J |
| CN701 | A | D | 20B |
| CN702 | A | D | 19B |
| CN703 | A | D | 19E |
| CN704 | A | D | 15I |
| CN2001 | A | D | 13L |
| CN2002 | A | D | 10B |
| CN2601 | A | D | 18A |
| CN3001 | A | D | 15M |
| CN3002 | A | D | 13M |
| CN3003 | A | D | 11M |
| CN3004 | A | D | 4L |
| CN3011 | A | D | 1G |
| CN3014 | A | D | 6A |
| CN6701 | A | D | 20O |
| CN7501 | A | D | 22C |
| CN7502 | A | D | 22I |
| CN7503 | A | D | 22F |
| CN7504 | A | D | 22A |
| CN7505 | A | D | 22J |
| CN7506 | A | D | 19I |
| CN7507 | A | D | 1K |
| CN7508 | A | D | 16L |
| CN7509 | A | D | 13P |
| CN7510 | A | D | 1N |
| **DIODE** | | | |
| D1 | B | C | 14I |
| D3 | B | C | 10J |
| D6 | A | D | 8G |
| D8 | B | C | 11K |
| D706 | B | C | 16E |
| D2001 | B | C | 11K |
| D2121 | A | D | 9F |
| D2201 | A | D | 8G |
| D2602 | A | D | 12B |
| D3001 | A | D | 7H |
| D3002 | A | D | 11M |
| D3003 | A | D | 14M |
| D3004 | A | D | 9M |
| D3005 | A | D | 9M |
| D3007 | B | C | 8O |
| D3008 | B | C | 6O |
| D3011 | A | D | 1L |
| D3012 | A | D | 1L |
| D3301 | B | C | 3H |
| D4001 | B | C | 8L |
| D4002 | B | C | 8L |
| D5501 | A | D | 13P |
| D5502 | A | D | 22N |
| D6002 | A | D | 16O |
| D6040 | B | C | 17N |
| D6201 | A | D | 22O |
| D6202 | A | D | 22M |
| D6203 | A | D | 15P |
| D6551 | A | D | 17M |
| D7501 | B | C | 17I |
| D7502 | B | C | 21G |
| D7503 | B | C | 1N |
| D7504 | B | C | 1N |
| D7505 | B | C | 15C |
| **IC** | | | |
| IC1 | B | C | 11G |
| IC2 | B | C | 6F |
| IC301 | A | D | 5D |
| IC701 | B | C | 20F |
| IC702 | B | C | 17G |
| IC703 | B | C | 18F |
| IC705 | B | C | 19G |
| IC706 | B | C | 16F |
| IC707 | A | D | 15E |
| IC708 | B | C | 18E |
| IC709 | B | C | 21C |
| IC710 | B | C | 18G |
| IC711 | B | C | 19F |
| IC712 | B | C | 21D |
| IC713 | B | C | 20D |
| IC2601 | B | C | 11B |
| IC2602 | B | C | 13B |
| IC2603 | B | C | 16B |
| IC2604 | B | C | 13C |
| IC2605 | B | C | 16C |
| IC2606 | B | C | 11C |
| IC2607 | B | C | 19B |
| IC2608 | B | C | 19C |
| IC2609 | A | D | 18C |
| IC2610 | B | C | 17B |
| IC3001 | B | C | 6M |
| IC3002 | B | C | 4M |
| IC3003 | A | D | 11O |
| IC3004 | A | D | 12N |
| IC3005 | A | D | 10P |
| IC3006 | B | C | 4O |
| IC3301 | B | C | 3F |
| IC3302 | B | C | 2J |
| IC3601 | B | C | 5B |
| IC3651 | B | C | 5H |
| IC6201 | A | D | 15P |
| **COIL** | | | |
| L1 | A | D | 12E |
| L2 | A | D | 13J |
| L3 | A | D | 11I |
| L4 | A | D | 8H |
| L5 | A | D | 8H |
| L11 | A | D | 11H |
| L12 | A | D | 11I |
| L13 | A | D | 8I |
| L14 | A | D | 8I |
| L15 | A | D | 6G |
| L17 | A | D | 7E |
| L18 | A | D | 7F |
| L19 | A | D | 6G |
| L20 | A | D | 13K |
| L22 | A | D | 11J |
| L24 | A | D | 12J |
| L25 | A | D | 7B |
| L26 | A | D | 6B |
| L27 | A | D | 8I |
| L28 | A | D | 13J |
| L301 | A | D | 6C |
| L302 | A | D | 7C |
| L303 | A | D | 7D |
| L401 | A | D | 8C |
| L402 | A | D | 8C |
| L701 | A | D | 20F |
| L702 | A | D | 16G |
| L712 | A | D | 20C |
| L713 | A | D | 21B |
| L714 | A | D | 16H |
| L715 | A | D | 21D |
| L2001 | A | D | 12D |
| L2251 | A | D | 12D |
| L2252 | A | D | 10D |
| L3001 | A | D | 12N |
| L3011 | A | D | 12N |
| L3012 | A | D | 12N |
| L3301 | A | D | 4G |
| L6001 | A | D | 16O |
| L6002 | A | D | 21O |
| L6005 | A | D | 16O |
| L6032 | A | D | 17O |
| L6201 | A | D | 21L |
| L6202 | A | D | 20L |
| L6203 | A | D | 21L |
| L6204 | A | D | 18L |
| L6208 | A | D | 19L |
| L7501 | A | D | 21I |
| **TRANSISTOR** | | | |
| Q1 | B | C | 13E |
| Q2 | B | C | 13E |
| Q3 | B | C | 13F |
| Q4 | B | C | 13F |
| Q5 | B | C | 6G |
| Q7 | B | C | 7F |
| Q8 | B | C | 6F |
| Q9 | B | C | 6G |
| Q10 | B | C | 8F |
| Q11 | B | C | 7G |
| Q12 | B | C | 8G |
| Q14 | B | C | 5F |
| Q16 | B | C | 13K |
| Q17 | B | C | 13K |
| Q18 | B | C | 12K |
| Q21 | B | C | 8J |
| Q24 | B | C | 7H |
| Q25 | B | C | 7J |
| Q28 | B | C | 12K |
| Q31 | B | C | 7E |
| Q32 | B | C | 12J |
| Q34 | B | C | 8J |
| Q37 | B | C | 10K |
| Q38 | B | C | 13J |
| Q39 | B | C | 7J |
| Q40 | B | C | 7J |
| Q41 | B | C | 8J |
| Q301 | B | C | 7C |
| Q302 | B | C | 6E |
| Q311 | B | C | 6C |
| Q312 | B | C | 6C |
| Q401 | B | C | 9B |
| Q402 | B | C | 8C |
| Q403 | B | C | 8B |
| Q404 | B | C | 8C |
| Q405 | B | C | 8C |
| Q701 | B | C | 21F |
| Q702 | B | C | 21F |
| Q703 | B | C | 21E |
| Q704 | B | C | 21E |
| Q705 | B | C | 21E |
| Q706 | B | C | 21E |
| Q707 | B | C | 21E |
| Q708 | B | C | 20G |
| Q709 | B | C | 21F |
| Q710 | B | C | 21G |
| Q711 | B | C | 21G |
| Q712 | B | C | 20G |
| Q713 | B | C | 17F |
| Q714 | B | C | 17E |
| Q725 | B | C | 17D |
| Q726 | B | C | 20B |
| Q727 | B | C | 21B |
| Q728 | B | C | 20B |
| Q729 | B | C | 19D |
| Q730 | B | C | 19D |
| Q731 | B | C | 20D |
| Q2001 | B | C | 13H |
| Q2002 | B | C | 14H |
| Q2003 | B | C | 13I |
| Q2004 | B | C | 13J |
| Q2011 | B | C | 14H |
| Q2051 | B | C | 12L |
| Q2052 | B | C | 11L |
| Q2053 | B | C | 11L |
| Q2054 | B | C | 11L |
| Q2061 | B | C | 9A |
| Q2062 | B | C | 8A |
| Q2251 | B | C | 8C |
| Q2252 | B | C | 8D |
| Q2601 | B | C | 17A |
| Q2602 | B | C | 17B |
| Q3001 | B | C | 11N |
| Q3002 | A | D | 8P |
| Q3003 | A | D | 8A |
| Q3004 | B | C | 12M |
| Q3005 | B | C | 9M |
| Q3007 | B | C | 6P |
| Q3009 | B | C | 4O |
| Q3010 | B | C | 5O |
| Q3011 | B | C | 5P |
| Q3302 | B | C | 4E |
| Q3303 | B | C | 4E |
| Q3304 | B | C | 5E |
| Q3305 | B | C | 3H |
| Q3306 | B | C | 3H |
| Q3307 | B | C | 2E |
| Q3308 | B | C | 3D |
| Q4001 | B | C | 8O |
| Q4002 | B | C | 9N |
| Q4003 | B | C | 9O |
| Q5501 | A | D | 14P |
| Q5502 | B | C | 15O |
| Q5503 | B | C | 15O |
| Q5504 | A | D | 21N |
| Q5505 | B | C | 21O |
| Q5506 | B | C | 21O |
| Q5507 | B | C | 20N |
| Q5508 | A | D | 20O |
| Q6030 | B | C | 18O |
| Q6031 | B | C | 18O |
| Q6032 | B | C | 20O |
| Q6040 | B | C | 18N |
| Q6041 | B | C | 17N |
| Q6042 | B | C | 16N |
| Q6501 | B | C | 19O |
| Q6502 | B | C | 19O |
| Q6551 | A | D | 18N |
| Q7501 | A | D | 21H |
| Q7502 | B | C | 22F |
| Q7503 | B | C | 8K |
| **RESISTOR** | | | |
| R1 | B | C | 13H |
| R2 | B | C | 13I |
| R3 | B | C | 13K |
| R4 | B | C | 11K |
| R5 | B | C | 10J |
| R6 | B | C | 10I |
| R7 | B | C | 10I |
| R8 | B | C | 9H |
| R9 | B | C | 9H |
| R21 | B | C | 12D |
| R22 | B | C | 12D |
| R23 | B | C | 6G |
| R24 | B | C | 7E |
| R25 | B | C | 7F |
| R26 | B | C | 7E |
| R27 | B | C | 7F |
| R28 | B | C | 7F |
| R29 | B | C | 7F |
| R30 | B | C | 7F |
| R31 | B | C | 7G |
| R32 | B | C | 6F |
| R33 | B | C | 13K |
| R34 | B | C | 13K |
| R35 | B | C | 13K |
| R36 | B | C | 9H |
| R38 | B | C | 10H |
| R39 | B | C | 8H |
| R40 | B | C | 8G |
| R41 | B | C | 8F |
| R42 | B | C | 8F |
| R43 | B | C | 8G |
| R44 | B | C | 8F |
| R45 | B | C | 8G |
| R46 | B | C | 9J |
| R47 | B | C | 8J |
| R48 | B | C | 9J |
| R51 | B | C | 8G |
| R54 | B | C | 13K |
| R61 | B | C | 7E |
| R62 | B | C | 12K |
| R65 | B | C | 6G |
| R66 | B | C | 12J |
| R68 | B | C | 6F |
| R69 | B | C | 11J |
| R70 | B | C | 12J |
| R72 | B | C | 8J |
| R73 | B | C | 8J |
| R75 | B | C | 12J |
| R76 | B | C | 9J |
| R77 | B | C | 14D |
| R79 | B | C | 9H |
| R80 | B | C | 8J |
| R81 | B | C | 5G |
| R82 | B | C | 12M |
| R84 | B | C | 5E |
| R85 | B | C | 8K |
| R88 | B | C | 8H |
| R90 | B | C | 12I |
| R91 | B | C | 11K |
| R92 | B | C | 13I |
| R93 | B | C | 13J |
| R104 | B | C | 13J |
| R113 | B | C | 6G |
| R114 | B | C | 7J |
| R115 | B | C | 7E |
| R301 | B | C | 5C |
| R302 | B | C | 6C |
| R303 | B | C | 6C |
| R304 | B | C | 7C |
| R305 | B | C | 7C |
| R306 | B | C | 6D |
| R307 | B | C | 7C |
| R308 | B | C | 7D |
| R309 | B | C | 7D |
| R310 | B | C | 6D |
| R311 | B | C | 6E |
| R312 | B | C | 5D |
| R313 | B | C | 5D |
| R314 | B | C | 6D |
| R315 | B | C | 6E |
| R316 | B | C | 6D |
| R321 | B | C | 5C |
| R326 | B | C | 6D |
| R327 | B | C | 6E |
| R328 | B | C | 7E |
| R329 | B | C | 6D |
| R401 | B | C | 9C |
| R402 | B | C | 9C |
| R403 | B | C | 9C |
| R404 | B | C | 8C |
| R405 | B | C | 8C |
| R406 | B | C | 8C |
| R407 | B | C | 8C |
| R408 | B | C | 8D |
| R409 | B | C | 8C |
| R701 | B | C | 20F |
| R702 | B | C | 21F |
| R703 | B | C | 21F |
| R704 | B | C | 21E |
| R705 | B | C | 21E |
| R706 | B | C | 21E |
| R707 | B | C | 21E |
| R708 | B | C | 21E |
| R709 | B | C | 21E |
| R710 | B | C | 20E |
| R711 | B | C | 20E |
| R712 | B | C | 21E |
| R713 | B | C | 21F |
| R714 | B | C | 21F |
| R715 | B | C | 21E |
| R716 | B | C | 20G |
| R717 | B | C | 21G |
| R718 | B | C | 21G |
| R719 | B | C | 21F |
| R720 | B | C | 20G |
| R721 | B | C | 21G |
| R722 | B | C | 20G |
| R723 | B | C | 20G |
| R724 | B | C | 21G |
| R725 | B | C | 18F |
| R726 | B | C | 18F |
| R727 | B | C | 17F |
| R728 | B | C | 17F |
| R729 | B | C | 17F |
| R730 | B | C | 17F |
| R767 | B | C | 20G |
| R768 | B | C | 19G |
| R769 | B | C | 16D |
| R770 | B | C | 16D |
| R771 | B | C | 17D |
| R772 | B | C | 17E |
| R773 | B | C | 16E |
| R774 | B | C | 16D |
| R775 | B | C | 17E |
| R776 | B | C | 17D |
| R777 | B | C | 18E |
| R778 | B | C | 20B |
| R779 | B | C | 21B |
| R780 | B | C | 21B |
| R781 | B | C | 20B |
| R782 | B | C | 21B |
| R783 | B | C | 20B |
| R784 | B | C | 21C |
| R785 | B | C | 20D |
| R786 | B | C | 20D |
| R787 | B | C | 16D |
| R2003 | B | C | 9F |
| R2004 | B | C | 8F |
| R2005 | B | C | 9E |
| R2006 | B | C | 10E |
| R2007 | B | C | 10E |
| R2008 | B | C | 10F |
| R2009 | B | C | 10F |
| R2010 | B | C | 10F |
| R2011 | B | C | 13J |
| R2012 | B | C | 11D |
| R2013 | B | C | 13G |
| R2014 | B | C | 13G |
| R2015 | B | C | 13G |
| R2016 | B | C | 14H |
| R2017 | B | C | 13H |
| R2018 | B | C | 13H |
| R2019 | B | C | 13I |
| R2020 | B | C | 13J |
| R2051 | B | C | 13L |
| R2052 | B | C | 13L |
| R2053 | B | C | 12L |
| R2054 | B | C | 12L |
| R2055 | B | C | 12K |
| R2056 | B | C | 11L |
| R2057 | B | C | 11K |
| R2058 | B | C | 11K |
| R2059 | B | C | 11L |
| R2060 | B | C | 11L |
| R2061 | B | C | 8A |
| R2062 | B | C | 9A |
| R2063 | B | C | 8B |
| R2064 | B | C | 7A |
| R2065 | B | C | 7A |
| R2121 | A | D | 8E |
| R2206 | B | C | 9F |
| R2207 | B | C | 8F |
| R2208 | B | C | 8F |
| R2209 | B | C | 8E |
| R2210 | B | C | 9F |
| R2211 | B | C | 9E |
| R2213 | B | C | 10E |
| R2215 | B | C | 10F |
| R2217 | B | C | 10D |
| R2218 | B | C | 10D |
| R2219 | B | C | 10D |
| R2220 | B | C | 10D |
| R2222 | B | C | 10E |
| R2223 | B | C | 10E |
| R2224 | B | C | 10E |
| R2225 | B | C | 10E |
| R2226 | B | C | 10D |
| R2227 | B | C | 10E |
| R2228 | B | C | 9G |
| R2229 | B | C | 9G |
| R2230 | B | C | 8F |
| R2231 | B | C | 8F |
| R2251 | B | C | 8D |
| R2252 | B | C | 8D |
| R2601 | B | C | 11A |
| R2602 | B | C | 12A |
| R2603 | B | C | 11A |
| R2604 | B | C | 11A |
| R2605 | B | C | 12A |
| R2606 | B | C | 11B |
| R2607 | B | C | 11B |
| R2608 | B | C | 11B |
| R2609 | B | C | 12B |
| R2610 | B | C | 16A |
| R2611 | B | C | 16B |
| R2612 | B | C | 16A |
| R2613 | B | C | 16B |
| R2614 | B | C | 16A |
| R2615 | B | C | 16B |
| R2616 | B | C | 17B |
| R2617 | B | C | 16B |
| R2618 | B | C | 16B |
| R2619 | B | C | 12B |
| R2620 | B | C | 12C |
| R2621 | B | C | 13C |
| R2622 | B | C | 13C |
| R2623 | B | C | 16B |
| R2624 | B | C | 16C |
| R2625 | B | C | 16C |
| R2626 | B | C | 16C |
| R2627 | B | C | 10C |
| R2628 | B | C | 11C |
| R2629 | B | C | 12C |
| R2630 | B | C | 11C |
| R2631 | B | C | 12C |
| R2632 | B | C | 12C |
| R2633 | B | C | 12D |
| R2634 | B | C | 11C |
| R2635 | B | C | 11C |
| R2636 | B | C | 12C |
| R2637 | B | C | 12A |
| R2638 | B | C | 12B |
| R2639 | B | C | 12B |
| R2640 | B | C | 13D |
| R2651 | B | C | 18B |
| R2652 | B | C | 18B |
| R2653 | B | C | 19A |
| R2654 | B | C | 19A |
| R2655 | B | C | 19B |
| R2656 | B | C | 19C |
| R2657 | B | C | 19C |
| R2658 | B | C | 18C |
| R2659 | B | C | 18C |
| R2660 | B | C | 21A |
| R2661 | B | C | 21A |
| R2662 | B | C | 21A |
| R2663 | B | C | 21A |
| R2664 | B | C | 20A |
| R2665 | B | C | 20A |
| R2666 | B | C | 20A |
| R2667 | B | C | 20A |
| R2668 | B | C | 19B |
| R2681 | B | C | 17B |
| R2682 | B | C | 17B |
| R2683 | B | C | 18B |
| R2684 | B | C | 17A |
| R2685 | B | C | 18A |
| R2686 | B | C | 18B |
| R2687 | B | C | 16B |
| R2688 | B | C | 18C |
| R2689 | B | C | 15A |
| R2690 | B | C | 15A |
| R2691 | B | C | 15C |
| R2692 | B | C | 13C |
| R3011 | B | C | 8O |
| R3012 | B | C | 8O |
| R3013 | B | C | 8O |
| R3014 | B | C | 8O |
| R3015 | B | C | 8O |
| R3016 | B | C | 8O |
| R3017 | B | C | 7O |
| R3018 | B | C | 7O |
| R3019 | B | C | 7O |
| R3020 | B | C | 7O |
| R3021 | B | C | 7P |
| R3022 | B | C | 7O |
| R3025 | B | C | 7O |
| R3026 | B | C | 7O |
| R3027 | B | C | 6O |
| R3029 | B | C | 6O |
| R3030 | B | C | 6O |
| R3031 | B | C | 6O |
| R3032 | B | C | 6O |
| R3033 | B | C | 6O |
| R3034 | B | C | 6O |
| R3035 | B | C | 6O |
| R3036 | B | C | 6O |
| R3038 | B | C | 5O |
| R3039 | B | C | 5O |
| R3040 | B | C | 5O |
| R3041 | B | C | 5P |
| R3042 | B | C | 5O |
| R3044 | B | C | 4P |
| R3046 | B | C | 4O |
| R3047 | B | C | 4O |
| R3048 | B | C | 4O |
| R3049 | B | C | 5N |
| R3050 | B | C | 5N |
| R3051 | B | C | 5N |
| R3052 | B | C | 5N |
| R3053 | B | C | 5N |
| R3054 | B | C | 4N |
| R3055 | B | C | 4N |
| R3056 | B | C | 4N |
| R3057 | B | C | 3N |
| R3058 | B | C | 4M |
| R3059 | B | C | 3N |
| R3060 | B | C | 5M |
| R3061 | B | C | 5M |
| R3062 | B | C | 4M |
| R3063 | B | C | 4M |
| R3066 | B | C | 4M |
| R3069 | B | C | 5L |
| R3071 | B | C | 6L |
| R3072 | B | C | 5K |
| R3073 | B | C | 5K |
| R3074 | B | C | 5K |
| R3075 | B | C | 6L |
| R3076 | B | C | 6L |
| R3077 | B | C | 6L |
| R3078 | B | C | 6L |
| R3079 | B | C | 6K |
| R3080 | B | C | 6K |
| R3081 | B | C | 5K |
| R3083 | B | C | 6K |
| R3085 | B | C | 7L |
| R3086 | B | C | 7L |
| R3087 | B | C | 7K |
| R3088 | B | C | 7K |
| R3089 | B | C | 7K |
| R3090 | B | C | 7K |
| R3091 | B | C | 7L |
| R3092 | B | C | 7L |
| R3093 | B | C | 7K |
| R3094 | B | C | 8K |
| R3095 | B | C | 8K |
| R3096 | B | C | 8K |
| R3097 | B | C | 8K |
| R3103 | B | C | 8L |
| R3104 | B | C | 8M |
| R3105 | B | C | 8M |
| R3106 | B | C | 8M |
| R3107 | B | C | 5P |
| R3201 | B | C | 11N |
| R3202 | B | C | 11N |
| R3203 | B | C | 11N |
| R3204 | B | C | 11N |
| R3205 | A | D | 6H |
| R3206 | B | C | 8P |
| R3207 | B | C | 8P |
| R3208 | B | C | 4D |
| R3209 | B | C | 4D |
| R3210 | B | C | 5L |
| R3211 | B | C | 5K |
| R3212 | B | C | 10M |
| R3213 | B | C | 5O |
| R3214 | B | C | 4L |
| R3215 | B | C | 4L |
| R3216 | B | C | 4L |
| R3217 | B | C | 5P |
| R3218 | A | D | 14M |
| R3219 | B | C | 12N |
| R3220 | B | C | 5P |
| R3222 | B | C | 10M |
| R3223 | B | C | 10O |
| R3224 | B | C | 10O |
| R3225 | B | C | 4K |
| R3229 | B | C | 5M |
| R3230 | B | C | 4M |
| R3231 | B | C | 4L |
| R3233 | B | C | 8P |
| R3234 | B | C | 6P |
| R3235 | B | C | 2N |
| R3236 | B | C | 2N |
| R3237 | B | C | 2K |
| R3238 | B | C | 3K |
| R3239 | B | C | 2K |
| R3241 | B | C | 4P |
| R3244 | B | C | 2K |
| R3245 | B | C | 7P |
| R3246 | B | C | 7P |
| R3247 | B | C | 6P |
| R3251 | B | C | 1F |
| R3252 | B | C | 8O |
| R3254 | B | C | 6K |
| R3255 | B | C | 6K |
| R3256 | B | C | 9K |
| R3257 | B | C | 4P |
| R3258 | B | C | 7P |
| R3259 | B | C | 10P |
| R3260 | B | C | 10P |
| R3261 | B | C | 2L |
| R3262 | B | C | 2M |
| R3301 | B | C | 3H |
| R3302 | B | C | 3H |
| R3303 | B | C | 3H |
| R3305 | B | C | 3H |
| R3306 | B | C | 3H |
| R3308 | B | C | 2G |
| R3309 | B | C | 2G |
| R3310 | B | C | 2H |
| R3311 | B | C | 2G |
| R3312 | B | C | 2G |
| R3313 | B | C | 2G |
| R3314 | B | C | 2G |
| R3315 | B | C | 2G |
| R3316 | B | C | 2F |
| R3317 | B | C | 2F |
| R3318 | B | C | 1F |
| R3319 | B | C | 2F |
| R3320 | B | C | 1F |
| R3321 | B | C | 1E |
| R3322 | B | C | 1E |
| R3323 | B | C | 1E |
| R3324 | B | C | 1D |
| R3325 | B | C | 1D |
| R3326 | B | C | 1D |
| R3327 | B | C | 2C |
| R3328 | B | C | 2C |
| R3329 | B | C | 2D |
| R3330 | B | C | 2C |
| R3331 | B | C | 2C |
| R3332 | B | C | 2C |
| R3334 | B | C | 2D |
| R3335 | B | C | 2E |
| R3336 | B | C | 2D |
| R3337 | B | C | 2E |
| R3338 | B | C | 2D |
| R3339 | B | C | 2E |
| R3340 | B | C | 2E |
| R3341 | B | C | 3E |
| R3342 | B | C | 3E |
| R3343 | B | C | 3D |
| R3344 | B | C | 3D |
| R3346 | B | C | 3D |
| R3347 | B | C | 3D |
| R3348 | B | C | 3D |
| R3349 | B | C | 3D |
| R3350 | B | C | 3C |
| R3351 | B | C | 3C |
| R3352 | B | C | 3C |
| R3353 | B | C | 3C |
| R3354 | B | C | 4C |
| R3355 | B | C | 4C |
| R3357 | B | C | 4E |
| R3358 | B | C | 4E |
| R3360 | B | C | 4F |
| R3361 | B | C | 5F |
| R3362 | B | C | 4F |
| R3363 | B | C | 4F |
| R3364 | B | C | 4G |
| R3365 | B | C | 4G |
| R3366 | B | C | 4G |
| R3369 | B | C | 3G |
| R3371 | B | C | 3G |
| R3376 | B | C | 4G |
| R3377 | B | C | 4G |
| R3378 | B | C | 3G |
| R3379 | B | C | 3G |
| R3380 | B | C | 4H |
| R3381 | B | C | 5F |
| R3401 | B | C | 3I |
| R3402 | B | C | 5F |
| R3403 | B | C | 2H |
| R3411 | B | C | 3D |
| R3412 | B | C | 3D |
| R3416 | B | C | 4E |
| R3417 | B | C | 5E |
| R3418 | B | C | 5E |
| R3419 | B | C | 3E |
| R3424 | B | C | 4E |
| R3425 | B | C | 2H |
| R3601 | B | C | 5C |
| R3602 | B | C | 5C |
| R3603 | B | C | 4C |
| R3604 | B | C | 4C |
| R3605 | B | C | 4C |
| R3606 | B | C | 4B |
| R3607 | B | C | 4B |
| R3608 | B | C | 4B |
| R3609 | B | C | 5B |
| R3610 | B | C | 5A |
| R3611 | B | C | 5B |
| R3612 | B | C | 5B |
| R3613 | B | C | 3H |
| R3614 | B | C | 6A |
| R3616 | B | C | 1D |
| R3617 | B | C | 2D |
| R3618 | B | C | 6B |
| R4001 | B | C | 8L |
| R4003 | B | C | 8N |
| R4004 | B | C | 8N |
| R4005 | B | C | 9N |
| R4007 | B | C | 8O |
| R4008 | B | C | 7O |
| R4009 | B | C | 8L |
| R4010 | B | C | 8L |
| R4011 | B | C | 8L |
| R4012 | B | C | 8L |
| R4013 | B | C | 9M |
| R4014 | B | C | 8L |
| R4015 | B | C | 8L |
| R4016 | B | C | 8L |
| R4017 | B | C | 8M |
| R4018 | B | C | 8M |
| R4019 | B | C | 8M |
| R4020 | B | C | 9O |
| R4021 | B | C | 8M |
| R5501 | B | C | 15O |
| R5502 | A | D | 21N |
| R5503 | B | C | 21N |
| R5504 | B | C | 21N |
| R5505 | B | C | 21O |
| R5506 | B | C | 21N |
| R5507 | B | C | 21O |
| R5508 | B | C | 20N |
| R5509 | B | C | 20O |
| R6020 | B | C | 20P |
| R6021 | B | C | 20P |
| R6022 | B | C | 20P |
| R6023 | B | C | 20P |
| R6024 | B | C | 19P |
| R6025 | B | C | 20P |
| R6030 | B | C | 18O |
| R6031 | B | C | 17P |
| R6032 | B | C | 19O |
| R6033 | B | C | 20O |
| R6034 | B | C | 18O |
| R6038 | B | C | 18P |
| R6040 | B | C | 18O |
| R6041 | B | C | 18N |
| R6042 | B | C | 18O |
| R6043 | B | C | 18N |
| R6044 | B | C | 17O |
| R6045 | B | C | 17O |
| R6046 | B | C | 16N |
| R6060 | B | C | 18P |
| R6061 | B | C | 18P |
| R6201 | B | C | 18M |
| R6202 | B | C | 18M |
| R6203 | B | C | 15P |
| R6204 | B | C | 15P |
| R6221 | B | C | 19N |
| R6222 | B | C | 20M |
| R6508 | B | C | 19O |
| R6509 | B | C | 19O |
| R6510 | B | C | 19O |
| R6511 | B | C | 19O |
| R6551 | B | C | 18M |
| R6552 | B | C | 18M |
| R6553 | B | C | 20O |
| R6554 | B | C | 20O |
| R6601 | B | C | 19N |
| R7501 | B | C | 20J |
| R7502 | B | C | 20J |
| R7503 | B | C | 22F |
| R7504 | B | C | 22F |
| R7505 | B | C | 22H |
| R7506 | B | C | 22H |
| R7507 | A | D | 21H |
| R7508 | B | C | 22F |
| R7509 | B | C | 1K |
| R7510 | B | C | 1K |
| R7511 | B | C | 1K |
| R7512 | B | C | 9K |
| R7513 | B | C | 17J |
| R7514 | B | C | 1D |
| **SWITCH** | | | |
| S3001 | A | D | 2B |
| S3002 | A | D | 4N |
| **TEST POINT** | | | |
| TP106 | A | D | 15N |
| TP111 | A | D | 15O |
| TP701 | A | D | 15D |
| TP2253 | A | D | 15N |
| TP3301 | B | C | 3G |
| TP3302 | B | C | 4G |
| TP3303 | B | C | 5F |
| TP3304 | B | C | 3H |
| TP3305 | B | C | 2G |
| TP3306 | B | C | 4G |
| TP3901 | B | C | 5N |
| TP3902 | B | C | 5N |
| TP3903 | B | C | 4M |
| TP3904 | B | C | 6M |
| TP3905 | B | C | 5M |
| TP3906 | B | C | 5N |
| TP3907 | B | C | 5N |
| TP3908 | B | C | 5N |
| TP3910 | B | C | 8M |
| TP3911 | B | C | 6O |
| TP4001 | A | D | 15O |
| TPGND | A | D | 15C |
| **OTHER** | | | |
| CF3301 | A | D | 4G |
| CF6031 | A | D | 18O |
| CP3002 | A | D | 11P |
| CP3003 | A | D | 11P |
| CP3004 | A | D | 15L |
| CP4001 | A | D | 11P |
| CP6201 | A | D | 14P |
| FL701 | A | D | 21B |
| FL702 | A | D | 20B |
| K2001 | B | C | 14K |
| K2002 | B | C | 13G |
| K2251 | B | C | 13E |
| K2252 | B | C | 12E |
| K2253 | B | C | 12E |
| K6080 | B | C | 20P |
| LC6201 | A | D | 19L |
| PC3001 | A | D | 4D |
| PC3002 | A | D | 5L |
| T2051 | A | D | 12L |
| T2052 | A | D | 9A |
| T6040 | A | D | 17N |
| TU6201 | A | D | 22M |
| VR701 | A | D | 17E |
| WR3001 | A | D | 18D |
| X1 | A | D | 10H |
| X2 | A | D | 10H |
| X3001 | A | D | 5M |
| X3002 | A | D | 5L |



## 4.30 DEMODULATOR AND ON SCREEN CIRCUIT BOARDS

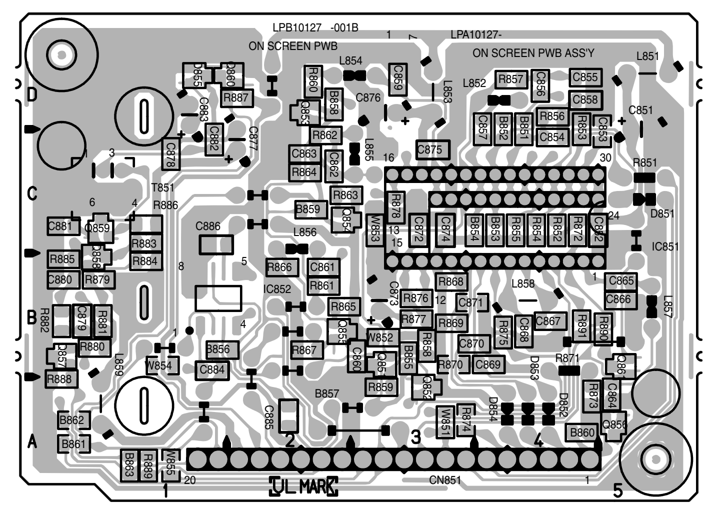
### <14> DEMODULATOR
### PB11076




### COMPONENT PARTS LOCATION GUIDE <DEMODULATOR>

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CAPACITOR** | | | |
| C1501 | A | D | 4C |
| C1502 | A | D | 3D |
| C1503 | A | D | 4D |
| C1504 | A | D | 4C |
| C1505 | A | D | 3D |
| C1506 | A | D | 3C |
| C1507 | A | D | 2C |
| C1508 | A | D | 1D |
| C1509 | A | D | 2C |
| C1510 | A | D | 1B |
| C1511 | A | D | 1A |
| C1512 | A | D | 2A |
| C1513 | A | D | 2B |
| C1514 | A | D | 2A |
| C1515 | A | D | 3B |
| C1516 | A | D | 3C |
| C1517 | A | D | 3B |
| C1518 | A | D | 3A |
| C1519 | A | D | 3B |
| C1520 | A | D | 3A |
| C1521 | A | D | 2C |
| **CONNECTOR** | | | |
| CN1501 | A | D | 3A |
| **IC** | | | |
| IC1501 | B | C | 2C |
| **TRANSISTOR** | | | |
| Q1501 | A | D | 3B |
| Q1502 | A | D | 3B |
| **RESISTOR** | | | |
| R1501 | A | D | 4C |
| R1502 | A | D | 2C |
| R1503 | A | D | 2C |
| R1504 | A | D | 2B |
| R1505 | A | D | 2B |
| R1506 | A | D | 2B |
| R1507 | A | D | 2B |
| R1508 | A | D | 3B |
| R1509 | A | D | 3B |
| R1510 | A | D | 4B |
| R1511 | A | D | 3A |
| R1514 | A | D | 2B |
| R1515 | A | D | 2C |
| R1517 | A | D | 2C |

### <17>ON SCREEN
### LPB10127-001B



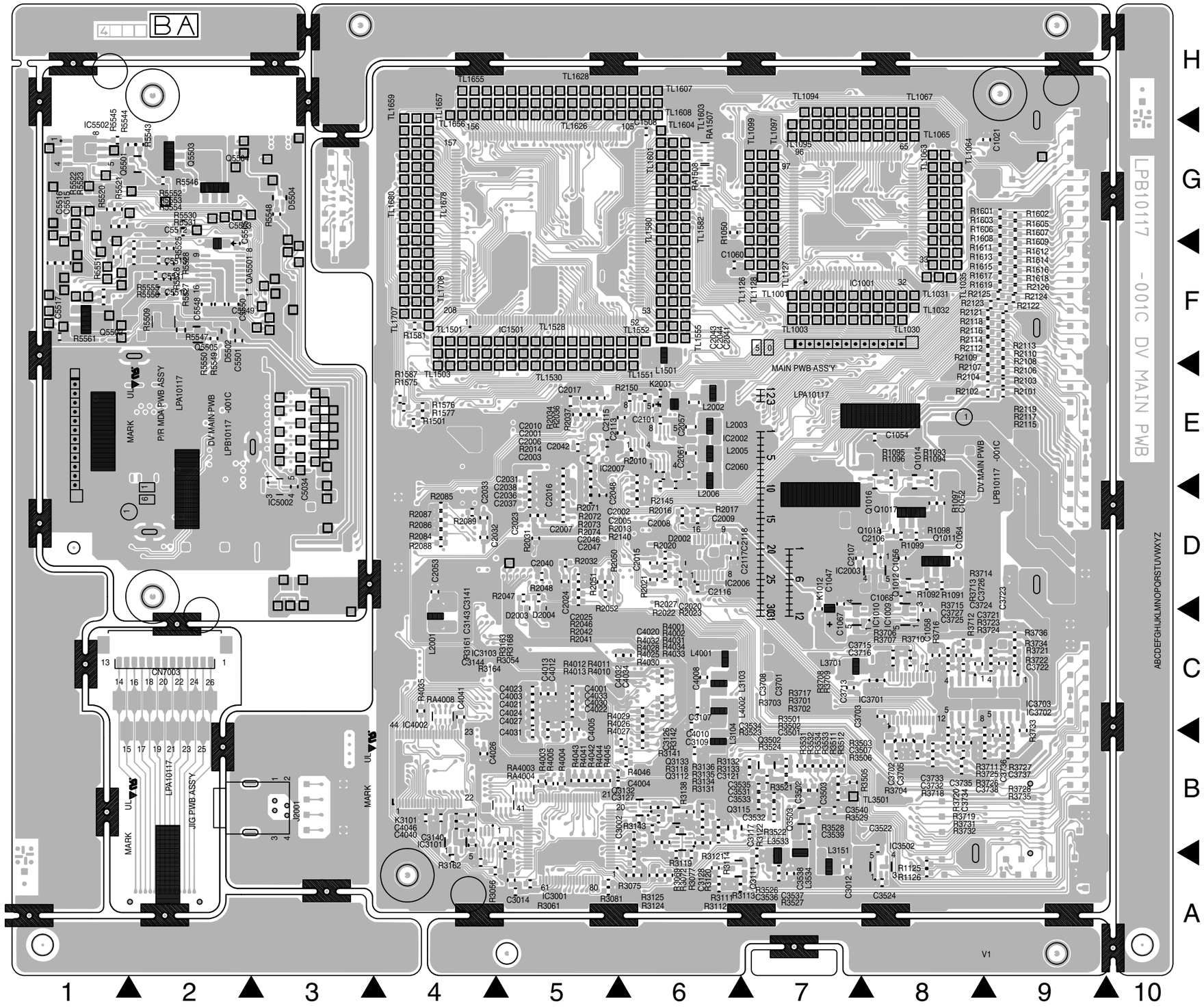

### COMPONENT PARTS LOCATION GUIDE <ON SCREEN>

| REF.NO. | LOCATION | | |
|---|---|---|---|
| **CAPACITOR** | | | |
| C851 | A | D | 5D |
| C852 | B | C | 5C |
| C853 | B | C | 5C |
| C854 | B | C | 4C |
| C855 | B | C | 4D |
| C856 | B | C | 4D |
| C857 | B | C | 4D |
| C858 | B | C | 4D |
| C859 | B | C | 3D |
| C860 | B | C | 3B |
| C861 | B | C | 2B |
| C862 | B | C | 2C |
| C863 | B | C | 2C |
| C864 | B | C | 5A |
| C865 | B | C | 5B |
| C866 | B | C | 5B |
| C867 | B | C | 4B |
| C868 | B | C | 4B |
| C869 | B | C | 4B |
| C870 | B | C | 4B |
| C871 | B | C | 3B |
| C872 | B | C | 3C |
| C873 | A | D | 3B |
| C874 | B | C | 3C |
| C875 | B | C | 3C |
| C876 | A | D | 3D |
| C877 | A | D | 2C |
| C878 | B | C | 1C |
| C879 | B | C | 1B |
| C880 | B | C | 1B |
| C881 | B | C | 1C |
| C882 | B | C | 1C |
| C883 | A | D | 1D |
| C884 | B | C | 1B |
| C885 | B | C | 2A |
| C886 | B | C | 1C |
| **CONNECTOR** | | | |
| CN851 | A | D | 4A |
| **DIODE** | | | |
| D851 | A | D | 5C |
| D852 | A | D | 4A |
| D853 | A | D | 4A |
| D854 | A | D | 4A |
| D855 | B | C | 1D |
| **IC** | | | |
| IC851 | A | D | 5B |
| IC852 | B | C | 1B |
| **COIL** | | | |
| L851 | A | D | 5D |
| L852 | A | D | 4D |
| L853 | A | D | 3D |
| L854 | A | D | 3D |
| L855 | A | D | 3C |
| L856 | A | D | 2C |
| L857 | A | D | 5B |
| L858 | A | D | 4B |
| L859 | A | D | 1A |
| **TRANSISTOR** | | | |
| Q851 | B | C | 3B |
| Q852 | B | C | 3A |
| Q853 | B | C | 2D |
| Q854 | B | C | 2C |
| Q855 | B | C | 2B |
| Q856 | B | C | 5A |
| Q857 | B | C | 1B |
| Q858 | B | C | 1B |
| Q859 | B | C | 1C |
| Q860 | B | C | 2D |
| Q861 | B | C | 5B |
| **RESISTOR** | | | |
| R851 | A | D | 5C |
| R852 | B | C | 4C |
| R853 | B | C | 4D |
| R854 | B | C | 4C |
| R855 | B | C | 4C |
| R856 | B | C | 4D |
| R857 | B | C | 4D |
| R858 | B | C | 3B |
| R859 | B | C | 3A |
| R860 | B | C | 2D |
| R861 | B | C | 2B |
| R862 | B | C | 2C |
| R863 | B | C | 2C |
| R864 | B | C | 2C |
| R865 | B | C | 2B |
| R866 | B | C | 2B |
| R867 | B | C | 2B |
| R868 | B | C | 3B |
| R869 | B | C | 3B |
| R870 | B | C | 3B |
| R871 | A | D | 4B |
| R872 | B | C | 4C |
| R873 | B | C | 4A |
| R874 | B | C | 3A |
| R875 | B | C | 4B |
| R876 | B | C | 3B |
| R877 | B | C | 3B |
| R878 | B | C | 3C |
| R879 | B | C | 1B |
| R880 | B | C | 1B |
| R881 | B | C | 1B |
| R882 | B | C | 1B |
| R883 | B | C | 1C |
| R884 | B | C | 1B |
| R885 | B | C | 1B |
| R886 | B | C | 1C |
| R887 | B | C | 2D |
| R888 | B | C | 1A |
| R889 | B | C | 1A |
| R890 | B | C | 5B |
| R891 | B | C | 4B |
| **OTHER** | | | |
| PC0219 | B | C | 4B |
| PC0223 | B | C | 5B |
| T851 | A | D | 1C |

## 4.31 PR/MDA, DV MAIN CIRCUIT BOARDS

**<16> P/R MDA, <50> DV MAIN**
**LPB10117-001C**

**— FOIL SIDE(B) —**



## COMPONENT PARTS LOCATION GUIDE <DV MAIN>

| REF.NO. | LOCATION |
|---|---|
| **CAPACITOR** | |
| C1001 | A C 7H |
| C1002 | A C 8H |
| C1003 | A C 8H |
| C1004 | A C 8H |
| C1006 | A C 8I |
| C1007 | A C 8I |
| C1008 | A C 7I |
| C1010 | A C 7I |
| C1011 | A C 7I |
| C1021 | B C 9J |
| C1041 | A C 9H |
| C1042 | A C 7I |
| C1043 | A C 7I |
| C1044 | A C 7H |
| C1045 | A C 8H |
| C1047 | B C 7E |
| C1048 | A C 8D |
| C1049 | A C 8D |
| C1050 | A C 7D |
| C1051 | A C 8F |
| C1052 | B C 8F |
| C1053 | A C 8F |
| C1054 | B C 8F |
| C1055 | A C 8E |
| C1056 | B C 8E |
| C1057 | A C 8D |
| C1058 | B C 8D |
| C1059 | A C 6H |
| C1060 | B C 6H |
| C1061 | A C 7F |
| C1062 | A C 8F |
| C1063 | A C 8E |
| C1064 | B C 8E |
| C1067 | B C 7E |
| C1068 | B C 8E |
| C1069 | A C 7E |
| C1070 | A C 8E |
| C1071 | A C 6J |
| C1072 | A C 6J |
| C1073 | A C 6J |
| C1074 | A C 6J |
| C1075 | A C 6J |
| C1501 | A C 5H |
| C1502 | A C 5H |
| C1503 | A C 5H |
| C1504 | A C 5H |
| C1505 | A C 5I |
| C1506 | A C 5J |
| C1507 | A C 5J |
| C1508 | B C 5J |
| C1509 | A C 5G |
| C1510 | A C 5G |
| C1515 | A C 4I |
| C1516 | A C 4I |
| C1517 | A C 3I |
| C1518 | A C 3I |
| C1521 | A C 3H |
| C1522 | A C 3J |
| C1523 | A C 4J |
| C2001 | B C 4F |
| C2002 | B C 5F |
| C2003 | B C 4F |
| C2005 | B C 5F |
| C2006 | B C 4F |
| C2007 | B C 4E |
| C2008 | B C 5E |
| C2009 | B C 6E |
| C2010 | B C 4F |
| C2011 | A C 5F |
| C2014 | A C 5E |
| C2015 | B C 5E |
| C2016 | B C 4F |
| C2017 | B C 4G |
| C2018 | A C 4G |
| C2019 | A C 5G |
| C2020 | B C 5E |
| C2022 | A C 4E |
| C2023 | B C 4F |
| C2024 | B C 4E |
| C2025 | B C 4E |
| C2026 | A C 4D |
| C2027 | A C 4E |
| C2028 | A C 4D |
| C2029 | A C 4E |
| C2031 | B C 4F |
| C2032 | B C 3E |
| C2033 | B C 3E |
| C2036 | B C 4F |
| C2037 | B C 4F |
| C2038 | B C 4F |
| C2039 | B C 5F |
| C2040 | B C 4E |

| REF.NO. | LOCATION |
|---|---|
| C2041 | B C 5G |
| C2042 | B C 4F |
| C2043 | B C 4G |
| C2044 | B C 5G |
| C2046 | B C 4F |
| C2047 | B C 4F |
| C2048 | B C 5F |
| C2051 | A C 6G |
| C2052 | B C 6G |
| C2053 | B C 3E |
| C2054 | A C 3E |
| C2055 | A C 6E |
| C2056 | A C 6E |
| C2057 | B C 6F |
| C2058 | A C 6G |
| C2059 | A C 6F |
| C2060 | B C 6F |
| C2061 | B C 6F |
| C2062 | A C 6F |
| C2101 | B C 5G |
| C2102 | A C 5F |
| C2103 | A C 5F |
| C2104 | A C 5F |
| C2105 | B C 5G |
| C2106 | B C 8E |
| C2107 | B C 7E |
| C2108 | A C 7E |
| C2109 | A C 7F |
| C2110 | A C 8F |
| C2111 | A C 5G |
| C2112 | A C 5G |
| C2113 | B C 5F |
| C2114 | B C 5G |
| C2115 | B C 5G |
| C2116 | B C 6E |
| C2117 | B C 6E |
| C2118 | B C 6E |
| C2119 | B C 5F |
| C3001 | B C 5B |
| C3002 | B C 5B |
| C3003 | A C 4B |
| C3004 | A C 5B |
| C3005 | A C 5B |
| C3006 | A C 5B |
| C3007 | A C 5B |
| C3008 | A C 5B |
| C3009 | A C 5B |
| C3010 | A C 4B |
| C3011 | A C 7B |
| C3012 | B C 7B |
| C3013 | A C 4B |
| C3014 | B C 4A |
| C3015 | A C 4B |
| C3016 | A C 4B |
| C3017 | A C 4B |
| C3101 | A C 5B |
| C3102 | A C 5B |
| C3103 | A C 5B |
| C3106 | A C 6D |
| C3107 | B C 6C |
| C3108 | A C 6C |
| C3109 | B C 6C |
| C3111 | B C 6A |
| C3112 | A C 6B |
| C3113 | A C 6B |
| C3114 | A C 6B |
| C3115 | A C 6B |
| C3116 | A C 6B |
| C3117 | B C 6B |
| C3118 | A C 5B |
| C3119 | A C 5B |
| C3121 | B C 6B |
| C3122 | A C 6B |
| C3123 | A C 6B |
| C3124 | A C 6B |
| C3125 | A C 5B |
| C3126 | B C 5B |
| C3127 | B C 5B |
| C3128 | B C 5B |
| C3131 | A C 7B |
| C3132 | A C 7B |
| C3140 | B C 3B |
| C3141 | B C 3B |
| C3142 | A C 3B |
| C3143 | B C 3B |
| C3144 | B C 3B |
| C3501 | B C 7C |
| C3502 | B C 7C |
| C3503 | B C 7C |
| C3504 | A C 7C |
| C3505 | A C 7C |
| C3506 | A C 7C |
| C3507 | B C 7C |

| REF.NO. | LOCATION |
|---|---|
| C3508 | A C 7B |
| C3509 | A C 7B |
| C3510 | A C 7B |
| C3511 | A C 7B |
| C3512 | A C 7B |
| C3513 | A C 7B |
| C3514 | A C 7B |
| C3515 | A C 7C |
| C3520 | A C 8B |
| C3521 | A C 8B |
| C3522 | B C 8B |
| C3523 | A C 8B |
| C3524 | B C 8B |
| C3525 | A C 8B |
| C3531 | B C 6B |
| C3532 | B C 6B |
| C3533 | B C 6B |
| C3534 | B C 6C |
| C3535 | B C 6C |
| C3536 | B C 6B |
| C3537 | B C 7B |
| C3538 | B C 7B |
| C3539 | B C 7B |
| C3540 | B C 7B |
| C3701 | B C 8C |
| C3702 | B C 8C |
| C3703 | B C 8C |
| C3704 | A C 8C |
| C3705 | B C 8C |
| C3706 | A C 8C |
| C3707 | A C 8C |
| C3708 | B C 8C |
| C3709 | A C 8C |
| C3710 | A C 8D |
| C3711 | A C 8D |
| C3712 | A C 7D |
| C3713 | B C 7D |
| C3714 | A C 8D |
| C3715 | B C 8D |
| C3716 | B C 8D |
| C3717 | A C 8D |
| C3718 | A C 8D |
| C3721 | B C 9D |
| C3722 | B C 9D |
| C3723 | B C 9D |
| C3724 | B C 9D |
| C3725 | B C 8D |
| C3726 | B C 9D |
| C3727 | B C 8D |
| C3728 | A C 9D |
| C3729 | A C 9C |
| C3730 | A C 9C |
| C3731 | A C 9D |
| C3732 | B C 8C |
| C3733 | B C 8C |
| C3734 | B C 9C |
| C3735 | B C 9C |
| C3736 | B C 9C |
| C3737 | B C 9C |
| C3738 | B C 9C |
| C4001 | B C 4D |
| C4002 | A C 3D |
| C4003 | B C 4D |
| C4004 | B C 5C |
| C4005 | B C 4C |
| C4007 | A C 6D |
| C4008 | B C 6D |
| C4009 | A C 6C |
| C4010 | B C 6C |
| C4011 | A C 4D |
| C4012 | B C 4D |
| C4013 | B C 4D |
| C4015 | A C 4D |
| C4016 | A C 4D |
| C4017 | A C 6D |
| C4018 | A C 6D |
| C4020 | B C 5C |
| C4021 | B C 4C |
| C4022 | B C 4C |
| C4023 | B C 4D |
| C4024 | B C 4C |
| C4025 | A C 3D |
| C4026 | B C 3C |
| C4027 | B C 4C |
| C4030 | B C 4C |
| C4031 | B C 4C |
| C4032 | B C 5D |
| C4033 | B C 4D |
| C4034 | B C 5D |
| C4040 | B C 3B |
| C4041 | B C 3C |
| C4042 | A C 3C |
| C4045 | A C 3B |

| REF.NO. | LOCATION |
|---|---|
| C4046 | B C 3B |
| C5053 | A C 2E |
| **CONNECTOR** | |
| CN1001 | A C 10E |
| CN1002 | A C 10I |
| CN1101 | A C 9C |
| CN1501 | A C 10H |
| CN1502 | A C 2I |
| CN2001 | A C 10G |
| CN3501 | A C 10B |
| CN3701 | A C 10C |
| **DIODE** | |
| D1001 | A C 7H |
| D1002 | A C 9I |
| D1003 | A C 8H |
| D1501 | A C 3H |
| D2002 | B C 5E |
| D2003 | B C 4E |
| D2004 | B C 4E |
| **IC** | |
| IC1001 | B C 7I |
| IC1002 | A C 9J |
| IC1003 | A C 6I |
| IC1004 | A C 6I |
| IC1005 | A C 8H |
| IC1006 | A C 8I |
| IC1007 | A C 8I |
| IC1008 | A C 8I |
| IC1009 | B C 8D |
| IC1010 | B C 7D |
| IC1011 | A C 7D |
| IC1501 | B C 4I |
| IC1502 | A C 3I |
| IC1601 | A C 5H |
| IC2001 | A C 4F |
| IC2002 | B C 5F |
| IC2003 | B C 8E |
| IC2004 | A C 5G |
| IC2006 | B C 6E |
| IC2007 | B C 5G |
| IC3001 | B C 4B |
| IC3101 | B C 3B |
| IC3102 | A C 3B |
| IC3103 | B C 3B |
| IC3151 | A C 7B |
| IC3501 | A C 7C |
| IC3502 | B C 8B |
| IC3701 | B C 8D |
| IC3702 | B C 9D |
| IC3703 | B C 9D |
| IC4001 | A C 4C |
| IC4002 | B C 3C |
| **JACK** | |
| J2001 | A D 1B |
| **COIL** | |
| L1001 | A C 6J |
| L1011 | A C 9G |
| L1012 | A C 8F |
| L1013 | A C 9F |
| L1015 | A C 9E |
| L1018 | A C 6H |
| L1501 | B C 5G |
| L1502 | A C 5G |
| L2001 | B C 3D |
| L2002 | B C 6G |
| L2003 | B C 6F |
| L2004 | A C 6E |
| L2005 | B C 6F |
| L2006 | B C 6F |
| L2007 | A C 7E |
| L2008 | A C 7E |
| L2009 | A C 5E |
| L2010 | A C 4E |
| L2011 | A C 4E |
| L2015 | A C 3D |
| L3103 | B C 6D |
| L3104 | B C 6C |
| L3111 | A C 6B |
| L3131 | A C 6B |
| L3151 | B C 7B |
| L3531 | A C 6B |
| L3532 | A C 6B |
| L3533 | B C 7B |
| L3534 | B C 7B |
| L3701 | B C 7D |
| L3702 | A C 9D |
| L4001 | B C 6D |
| L4002 | B C 6C |
| L4003 | A C 6D |
| L4004 | A C 3B |
| **TRANSISTOR** | |
| Q1001 | A C 9J |

| REF.NO. | LOCATION |
|---|---|
| Q1002 | A C 8J |
| Q1011 | B C 8E |
| Q1012 | B C 8E |
| Q1013 | A C 8F |
| Q1014 | B C 8F |
| Q1015 | A C 8F |
| Q1016 | B C 8F |
| Q1017 | B C 8F |
| Q1018 | B C 8E |
| Q1501 | A C 4I |
| Q1602 | A C 3I |
| Q1603 | A C 3I |
| Q3101 | A C 5A |
| Q3102 | A C 5B |
| Q3111 | B C 6B |
| Q3112 | B C 5B |
| Q3113 | A C 5B |
| Q3114 | A C 5B |
| Q3115 | B C 6B |
| Q3131 | A C 6B |
| Q3132 | B C 5B |
| Q3133 | B C 5B |
| Q3501 | A C 6C |
| Q3502 | B C 6C |
| Q3503 | B C 7B |
| **RESISTOR** | |
| R1002 | A C 7H |
| R1003 | A C 7H |
| R1004 | A C 7H |
| R1005 | A C 7H |
| R1006 | A C 7H |
| R1009 | A C 7H |
| R1010 | A C 7H |
| R1011 | A C 7H |
| R1012 | A C 7H |
| R1013 | A C 7H |
| R1014 | A C 7H |
| R1015 | A C 7H |
| R1018 | A C 7H |
| R1019 | A C 8H |
| R1020 | A C 8H |
| R1021 | A C 8H |
| R1022 | A C 8H |
| R1025 | A C 8H |
| R1026 | A C 8H |
| R1027 | A C 8I |
| R1028 | A C 7H |
| R1029 | A C 7H |
| R1030 | A C 8H |
| R1031 | A C 8H |
| R1032 | A C 8I |
| R1033 | A C 8I |
| R1035 | A C 8J |
| R1036 | A C 7H |
| R1037 | A C 8I |
| R1038 | A C 8I |
| R1041 | A C 7J |
| R1043 | A C 7I |
| R1045 | A C 6I |
| R1046 | A C 7I |
| R1047 | A C 7I |
| R1048 | A C 7I |
| R1049 | A C 7I |
| R1050 | B C 6I |
| R1051 | A C 7H |
| R1052 | A C 7H |
| R1053 | A C 7H |
| R1061 | A C 9I |
| R1062 | A C 9I |
| R1063 | A C 9I |
| R1064 | A C 8J |
| R1065 | A C 8J |
| R1073 | A C 6J |
| R1074 | A C 6J |
| R1075 | A C 6J |
| R1076 | A C 6J |
| R1077 | A C 6I |
| R1078 | A C 6I |
| R1079 | A C 6J |
| R1081 | A C 8H |
| R1082 | A C 8H |
| R1083 | A C 8I |
| R1084 | A C 7H |
| R1085 | A C 8H |
| R1091 | B C 8E |
| R1092 | B C 8E |
| R1093 | B C 8F |
| R1094 | B C 8F |
| R1095 | B C 8F |
| R1096 | B C 8F |
| R1097 | B C 8F |
| R1098 | B C 8E |
| R1099 | B C 8E |

| REF.NO. | LOCATION |
|---|---|
| R1100 | A C 8D |
| R1125 | B C 8B |
| R1126 | B C 8B |
| R1501 | B C 3G |
| R1502 | A C 3G |
| R1503 | A C 3H |
| R1504 | A C 3H |
| R1505 | A C 3G |
| R1506 | A C 3G |
| R1514 | A C 3G |
| R1515 | A C 3G |
| R1516 | A C 3G |
| R1517 | A C 5H |
| R1518 | A C 5H |
| R1519 | A C 5H |
| R1520 | A C 5H |
| R1521 | A C 5H |
| R1522 | A C 5H |
| R1523 | A C 5H |
| R1524 | A C 5H |
| R1525 | A C 5H |
| R1526 | A C 5I |
| R1527 | A C 5H |
| R1528 | A C 5I |
| R1531 | A C 5I |
| R1535 | A C 4I |
| R1536 | A C 4I |
| R1537 | A C 4I |
| R1538 | A C 4I |
| R1539 | A C 4I |
| R1540 | A C 5H |
| R1546 | A C 5I |
| R1547 | A C 4I |
| R1552 | A C 4J |
| R1553 | A C 4J |
| R1558 | A C 3J |
| R1560 | A C 4J |
| R1562 | A C 3J |
| R1563 | A C 3J |
| R1564 | A C 3J |
| R1565 | A C 4J |
| R1566 | A C 4I |
| R1567 | A C 3J |
| R1568 | A C 3I |
| R1569 | A C 3I |
| R1570 | A C 3H |
| R1575 | B C 2G |
| R1576 | B C 3G |
| R1577 | B C 3G |
| R1578 | A C 3H |
| R1579 | A C 2H |
| R1580 | A C 2H |
| R1581 | B C 3H |
| R1582 | A C 3H |
| R1583 | A C 3H |
| R1584 | A C 3G |
| R1585 | A C 3G |
| R1586 | A C 3G |
| R1587 | B C 2G |
| R1588 | A C 3H |
| R1589 | A C 2H |
| R1590 | A C 2H |
| R1591 | A C 5G |
| R1592 | A C 5G |
| R1593 | A C 5G |
| R1594 | A C 4J |
| R1601 | B C 9I |
| R1602 | B C 9I |
| R1603 | B C 9I |
| R1605 | B C 9I |
| R1606 | B C 9I |
| R1607 | B C 9I |
| R1608 | B C 9I |
| R1609 | B C 9H |
| R1611 | B C 9H |
| R1612 | B C 9H |
| R1613 | B C 9H |
| R1614 | B C 9H |
| R1615 | B C 9H |
| R1616 | B C 9H |
| R1617 | B C 9H |
| R1618 | B C 9H |
| R1619 | B C 9H |
| R1631 | A C 5H |
| R1632 | A C 5H |
| R1634 | A C 5H |
| R1635 | A C 5H |
| R1636 | A C 5H |
| R1641 | A C 3H |
| R1642 | A C 3I |
| R1644 | A C 2I |
| R1645 | A C 3H |
| R1646 | A C 2I |

| REF.NO. | LOCATION |
|---|---|
| R1647 | A C 2I |
| R1648 | A C 2I |
| R1649 | A C 2I |
| R1650 | A C 2I |
| R1651 | A C 2I |
| R1653 | A C 2I |
| R1655 | A C 2I |
| R1661 | A C 3I |
| R1662 | A C 3I |
| R1663 | A C 3I |
| R1665 | A C 3I |
| R1666 | A C 4I |
| R1667 | A C 3I |
| R1668 | A C 3I |
| R2009 | A C 5F |
| R2010 | B C 5F |
| R2011 | A C 5F |
| R2012 | A C 5F |
| R2013 | B C 5F |
| R2014 | B C 4F |
| R2015 | A C 5F |
| R2016 | B C 5F |
| R2017 | B C 6F |
| R2018 | A C 5F |
| R2019 | A C 5F |
| R2020 | B C 5E |
| R2021 | B C 5E |
| R2022 | B C 5E |
| R2023 | B C 5E |
| R2027 | B C 5E |
| R2031 | B C 4E |
| R2032 | B C 4E |
| R2033 | A C 4G |
| R2034 | B C 4G |
| R2035 | A C 4G |
| R2036 | B C 4G |
| R2037 | B C 5G |
| R2038 | A C 4G |
| R2039 | A C 4G |
| R2040 | A C 5G |
| R2041 | B C 4E |
| R2042 | B C 4E |
| R2043 | A C 4E |
| R2044 | A C 4E |
| R2046 | B C 4E |
| R2047 | B C 4E |
| R2048 | B C 4E |
| R2049 | A C 5D |
| R2050 | B C 5E |
| R2051 | B C 5E |
| R2052 | B C 5E |
| R2053 | A C 3E |
| R2054 | A C 3E |
| R2055 | A C 3E |
| R2056 | A C 3E |
| R2057 | A C 3E |
| R2058 | A C 3E |
| R2059 | A C 3E |
| R2060 | A C 3E |
| R2061 | A C 3E |
| R2062 | A C 3E |
| R2071 | B C 4F |
| R2072 | B C 4F |
| R2073 | B C 4F |
| R2074 | B C 4F |
| R2084 | B C 3E |
| R2085 | B C 3F |
| R2086 | B C 3E |
| R2087 | B C 3F |
| R2088 | B C 3E |
| R2089 | B C 3F |
| R2098 | A C 2B |
| R2101 | B C 9G |
| R2102 | B C 9G |
| R2103 | B C 9G |
| R2104 | B C 9G |
| R2106 | B C 9G |
| R2107 | B C 9G |
| R2108 | B C 9G |
| R2109 | B C 9G |
| R2110 | B C 9G |
| R2112 | B C 9G |
| R2113 | B C 9G |
| R2114 | B C 9G |
| R2115 | B C 9G |
| R2116 | B C 9H |
| R2117 | B C 9H |
| R2118 | B C 9H |
| R2119 | B C 9H |
| R2121 | B C 9H |
| R2122 | B C 9H |
| R2123 | B C 9H |
| R2124 | B C 9H |
| R2125 | B C 9H |

| REF.NO. | LOCATION |
|---|---|
| R2126 | B C 9H |
| R2138 | B C 5G |
| R2139 | B C 5F |
| R2140 | B C 5F |
| R2141 | A C 5F |
| R2142 | A C 5F |
| R2143 | A C 5F |
| R2144 | A C 5E |
| R2145 | B C 5F |
| R2146 | A C 5F |
| R2148 | A C 5F |
| R2149 | A C 5F |
| R2150 | B C 5G |
| R3003 | B C 5B |
| R3004 | B C 5B |
| R3005 | B C 5B |
| R3007 | A C 5B |
| R3008 | A C 4B |
| R3024 | A C 5B |
| R3025 | A C 4B |
| R3026 | A C 4B |
| R3027 | A C 4B |
| R3028 | A C 4B |
| R3029 | A C 4B |
| R3032 | A C 4B |
| R3033 | A C 4B |
| R3034 | A C 4B |
| R3035 | A C 4B |
| R3048 | A C 4B |
| R3054 | B C 4B |
| R3056 | B C 4B |
| R3057 | A C 4B |
| R3058 | A C 4B |
| R3059 | A C 4B |
| R3060 | A C 4B |
| R3061 | B C 4B |
| R3062 | A C 4A |
| R3063 | A C 4B |
| R3064 | A C 4B |
| R3065 | A C 4A |
| R3069 | B C 5B |
| R3070 | A C 4B |
| R3071 | A C 4B |
| R3072 | B C 5B |
| R3073 | A C 5B |
| R3074 | A C 4B |
| R3075 | B C 5B |
| R3076 | A C 4B |
| R3077 | B C 5B |
| R3078 | A C 4B |
| R3079 | A C 4B |
| R3080 | A C 5A |
| R3081 | B C 5A |
| R3101 | A C 5A |
| R3102 | A C 5B |
| R3103 | A C 5B |
| R3104 | A C 5B |
| R3105 | A C 5B |
| R3106 | A C 5B |
| R3111 | B C 6B |
| R3112 | B C 6A |
| R3113 | B C 6B |
| R3114 | B C 6B |
| R3115 | A C 6B |
| R3116 | A C 6B |
| R3117 | A C 6B |
| R3118 | B C 5B |
| R3119 | B C 5B |
| R3120 | B C 5B |
| R3121 | B C 6B |
| R3122 | B C 6B |
| R3123 | A C 5B |
| R3124 | B C 5B |
| R3125 | B C 5B |
| R3131 | B C 6B |
| R3132 | B C 6B |
| R3133 | B C 6B |
| R3134 | B C 6B |
| R3135 | B C 6B |
| R3136 | B C 6B |
| R3137 | A C 5B |
| R3138 | B C 6B |
| R3139 | A C 5B |
| R3140 | A C 5B |
| R3141 | B C 5B |
| R3142 | B C 5B |
| R3143 | B C 5B |
| R3161 | B C 3B |
| R3162 | B C 3B |
| R3163 | B C 4B |
| R3164 | B C 3B |
| R3168 | B C 4B |
| R3501 | B C 7C |

| REF.NO. | LOCATION |
|---|---|
| R3502 | B C 7C |
| R3503 | B C 7C |
| R3504 | A C 7B |
| R3505 | B C 7C |
| R3506 | B C 7B |
| R3507 | A C 7B |
| R3508 | A C 7B |
| R3509 | A C 7B |
| R3510 | A C 7B |
| R3511 | B C 7C |
| R3512 | B C 7C |
| R3521 | B C 6B |
| R3522 | B C 6B |
| R3523 | B C 6C |
| R3524 | B C 6C |
| R3526 | B C 6B |
| R3527 | B C 7B |
| R3528 | B C 7B |
| R3529 | B C 7B |
| R3531 | B C 7C |
| R3532 | B C 7C |
| R3533 | B C 7C |
| R3534 | B C 7C |
| R3701 | B C 8C |
| R3702 | B C 8C |
| R3703 | B C 8C |
| R3704 | B C 8C |
| R3705 | A C 8C |
| R3706 | B C 8D |
| R3707 | B C 8D |
| R3708 | B C 8D |
| R3709 | B C 8D |
| R3710 | B C 8D |
| R3711 | B C 9C |
| R3712 | B C 9D |
| R3713 | B C 9D |
| R3714 | B C 9D |
| R3715 | B C 8D |
| R3716 | B C 8D |
| R3717 | B C 8C |
| R3718 | B C 8C |
| R3719 | B C 9C |
| R3720 | B C 9C |
| R3721 | B C 9D |
| R3722 | B C 9D |
| R3723 | B C 9D |
| R3724 | B C 9D |
| R3725 | B C 9C |
| R3726 | B C 9C |
| R3727 | B C 9C |
| R3728 | B C 9C |
| R3731 | B C 9C |
| R3732 | B C 9C |
| R3733 | B C 9C |
| R3734 | B C 9D |
| R3735 | B C 9C |
| R3736 | B C 9D |
| R3740 | A C 9D |
| R4001 | B C 5D |
| R4002 | B C 5D |
| R4003 | B C 4C |
| R4004 | B C 4C |
| R4005 | B C 4C |
| R4006 | A C 5D |
| R4007 | A C 5D |
| R4008 | A C 5D |
| R4009 | A C 5D |
| R4010 | B C 4C |
| R4011 | B C 4C |
| R4012 | B C 4C |
| R4013 | B C 4C |
| R4015 | A C 4D |
| R4016 | A C 4D |
| R4017 | A C 4D |
| R4018 | A C 4D |
| R4020 | A C 5C |
| R4021 | A C 5C |
| R4022 | A C 5C |
| R4025 | B C 5C |
| R4026 | B C 5C |
| R4027 | B C 5C |
| R4028 | B C 5C |
| R4029 | B C 5C |
| R4030 | B C 5C |
| R4031 | B C 5D |
| R4032 | B C 5C |
| R4033 | B C 5C |
| R4034 | B C 5C |
| R4035 | B C 3C |
| R4036 | A C 3C |
| R4037 | A C 3C |
| R4038 | A C 3C |
| R4039 | A C 3C |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| R4041 | B | C | 4C |
| R4042 | B | C | 4C |
| R4043 | B | C | 4C |
| R4044 | B | C | 5C |
| R4045 | B | C | 5C |
| R4046 | B | C | 5C |
| RA1001 | A | C | 8I |
| RA1002 | A | C | 7I |
| RA1003 | A | C | 7I |
| RA1004 | A | C | 7I |
| RA1005 | A | C | 9I |
| RA1006 | A | C | 9I |
| RA1501 | A | C | 4H |
| RA1502 | A | C | 4H |
| RA1503 | A | C | 4H |
| RA1504 | A | C | 4H |
| RA1505 | A | C | 5J |
| RA1506 | A | C | 5I |
| RA1507 | B | C | 6I |
| RA1508 | B | C | 6I |
| RA1509 | A | C | 5I |
| RA1510 | A | C | 4I |
| RA4001 | A | C | 4B |
| RA4002 | A | C | 4C |
| RA4003 | B | C | 4B |
| RA4004 | B | C | 4C |
| RA4006 | A | C | 3C |
| RA4007 | A | C | 3C |
| RA4008 | B | C | 3C |
| **TEST POINT** | | | |
| TP1001 | A | C | 9I |
| TP1002 | A | C | 9I |
| TP1501 | A | C | 2I |
| TP1503 | A | C | 3I |
| TP1504 | A | C | 3I |
| TP1505 | A | C | 3I |
| TP1507 | A | C | 2J |
| TP1508 | A | C | 3J |
| TP1509 | A | C | 3J |
| TP1510 | A | C | 2J |
| **OTHER** | | | |
| K1001 | A | C | 7H |
| K1011 | A | C | 8G |
| K1012 | B | C | 7E |
| K2001 | B | C | 5G |
| K2002 | A | C | 6E |
| K3101 | B | C | 3B |
| LC1002 | A | C | 8G |
| LC1003 | A | C | 8F |
| LC1005 | A | C | 8E |
| LC3101 | A | C | 3B |
| TH2001 | A | C | 5F |
| TL1001 | B | C | 7H |
| TL1002 | B | C | 7H |
| TL1003 | B | C | 7H |
| TL1004 | B | C | 7H |
| TL1005 | B | C | 7H |
| TL1006 | B | C | 7H |
| TL1007 | B | C | 7H |
| TL1008 | B | C | 7H |
| TL1009 | B | C | 7H |
| TL1010 | B | C | 7H |
| TL1011 | B | C | 7H |
| TL1012 | B | C | 7H |
| TL1013 | B | C | 7H |
| TL1014 | B | C | 7H |
| TL1015 | B | C | 7H |
| TL1016 | B | C | 7H |
| TL1017 | B | C | 7H |
| TL1018 | B | C | 7H |
| TL1019 | B | C | 7H |
| TL1020 | B | C | 7H |
| TL1021 | B | C | 7H |
| TL1022 | B | C | 8H |
| TL1023 | B | C | 8H |
| TL1024 | B | C | 8H |
| TL1025 | B | C | 8H |
| TL1026 | B | C | 8H |
| TL1027 | B | C | 8H |
| TL1028 | B | C | 8H |
| TL1029 | B | C | 8H |
| TL1030 | B | C | 8H |
| TL1031 | B | C | 8H |
| TL1032 | B | C | 8H |
| TL1033 | B | C | 8H |
| TL1034 | B | C | 8H |
| TL1035 | B | C | 8H |
| TL1036 | B | C | 8H |
| TL1037 | B | C | 8H |
| TL1038 | B | C | 8H |
| TL1039 | B | C | 8H |
| TL1040 | B | C | 8H |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| TL1041 | B | C | 8H |
| TL1042 | B | C | 8I |
| TL1043 | B | C | 8I |
| TL1044 | B | C | 8I |
| TL1045 | B | C | 8I |
| TL1046 | B | C | 8I |
| TL1047 | B | C | 8I |
| TL1048 | B | C | 8I |
| TL1049 | B | C | 8I |
| TL1050 | B | C | 8I |
| TL1051 | B | C | 8I |
| TL1052 | B | C | 8I |
| TL1053 | B | C | 8I |
| TL1054 | B | C | 8I |
| TL1055 | B | C | 8I |
| TL1056 | B | C | 8I |
| TL1057 | B | C | 8I |
| TL1058 | B | C | 8I |
| TL1059 | B | C | 8I |
| TL1060 | B | C | 8I |
| TL1061 | B | C | 8I |
| TL1062 | B | C | 8I |
| TL1063 | B | C | 8I |
| TL1064 | B | C | 8I |
| TL1065 | B | C | 8J |
| TL1066 | B | C | 8J |
| TL1067 | B | C | 8J |
| TL1068 | B | C | 8J |
| TL1069 | B | C | 8J |
| TL1070 | B | C | 8J |
| TL1071 | B | C | 8J |
| TL1072 | B | C | 8J |
| TL1073 | B | C | 8J |
| TL1074 | B | C | 8J |
| TL1075 | B | C | 8J |
| TL1076 | B | C | 8J |
| TL1077 | B | C | 7J |
| TL1078 | B | C | 7J |
| TL1079 | B | C | 7J |
| TL1080 | B | C | 7J |
| TL1081 | B | C | 7J |
| TL1082 | B | C | 7J |
| TL1083 | B | C | 7J |
| TL1084 | B | C | 7J |
| TL1085 | B | C | 7J |
| TL1086 | B | C | 7J |
| TL1087 | B | C | 7J |
| TL1088 | B | C | 7J |
| TL1089 | B | C | 7J |
| TL1090 | B | C | 7J |
| TL1091 | B | C | 7J |
| TL1092 | B | C | 7J |
| TL1093 | B | C | 7J |
| TL1094 | B | C | 7J |
| TL1095 | B | C | 7J |
| TL1096 | B | C | 7J |
| TL1097 | B | C | 6I |
| TL1098 | B | C | 6I |
| TL1099 | B | C | 6I |
| TL1100 | B | C | 6I |
| TL1101 | B | C | 6I |
| TL1102 | B | C | 6I |
| TL1103 | B | C | 6I |
| TL1104 | B | C | 6I |
| TL1105 | B | C | 6I |
| TL1106 | B | C | 6I |
| TL1107 | B | C | 6I |
| TL1108 | B | C | 6I |
| TL1109 | B | C | 6I |
| TL1110 | B | C | 6I |
| TL1111 | B | C | 6I |
| TL1112 | B | C | 6I |
| TL1113 | B | C | 6I |
| TL1114 | B | C | 6I |
| TL1115 | B | C | 6I |
| TL1116 | B | C | 6I |
| TL1117 | B | C | 6I |
| TL1118 | B | C | 6I |
| TL1119 | B | C | 6I |
| TL1120 | B | C | 6I |
| TL1121 | B | C | 6H |
| TL1122 | B | C | 6H |
| TL1123 | B | C | 6H |
| TL1124 | B | C | 6H |
| TL1125 | B | C | 6H |
| TL1126 | B | C | 6H |
| TL1127 | B | C | 6H |
| TL1128 | B | C | 6H |
| TL1501 | B | C | 3G |
| TL1502 | B | C | 3G |
| TL1503 | B | C | 3G |
| TL1504 | B | C | 3G |
| TL1505 | B | C | 3G |

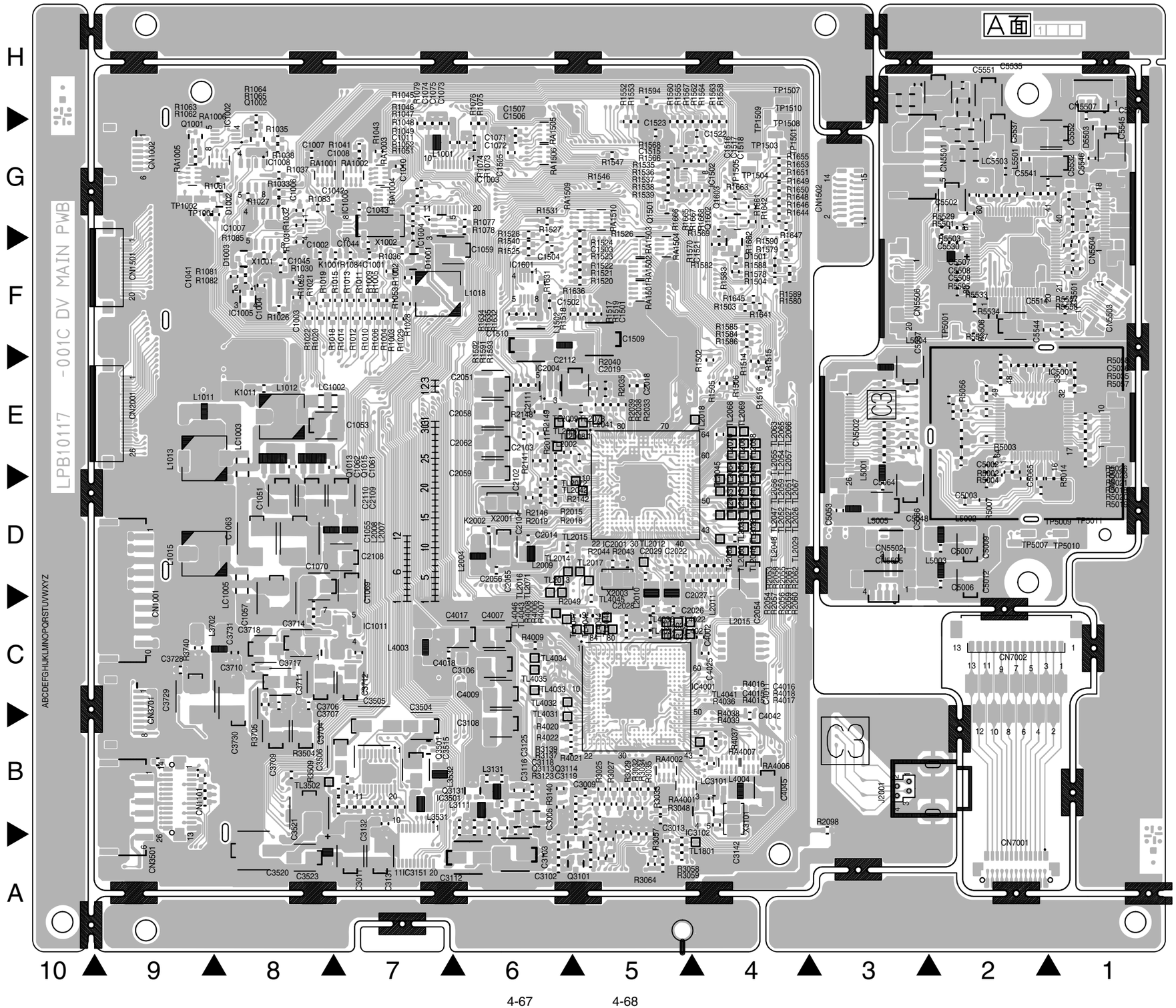
| REF.NO. | LOCATION | | |
|---|---|---|---|
| TL1506 | B | C | 3G |
| TL1507 | B | C | 3G |
| TL1508 | B | C | 3G |
| TL1509 | B | C | 3G |
| TL1510 | B | C | 3G |
| TL1511 | B | C | 3G |
| TL1512 | B | C | 3G |
| TL1513 | B | C | 3G |
| TL1514 | B | C | 3G |
| TL1515 | B | C | 3G |
| TL1516 | B | C | 3G |
| TL1517 | B | C | 3G |
| TL1518 | B | C | 3G |
| TL1519 | B | C | 4G |
| TL1520 | B | C | 4G |
| TL1521 | B | C | 4G |
| TL1522 | B | C | 4G |
| TL1523 | B | C | 4G |
| TL1524 | B | C | 4G |
| TL1525 | B | C | 4G |
| TL1526 | B | C | 4G |
| TL1527 | B | C | 4G |
| TL1528 | B | C | 4G |
| TL1529 | B | C | 4G |
| TL1530 | B | C | 4G |
| TL1531 | B | C | 4G |
| TL1532 | B | C | 4G |
| TL1533 | B | C | 4G |
| TL1534 | B | C | 4G |
| TL1535 | B | C | 4G |
| TL1536 | B | C | 4G |
| TL1537 | B | C | 4G |
| TL1538 | B | C | 4G |
| TL1539 | B | C | 4G |
| TL1540 | B | C | 5G |
| TL1541 | B | C | 5G |
| TL1542 | B | C | 5G |
| TL1543 | B | C | 5G |
| TL1544 | B | C | 5G |
| TL1545 | B | C | 5G |
| TL1546 | B | C | 5G |
| TL1547 | B | C | 5G |
| TL1548 | B | C | 5G |
| TL1549 | B | C | 5G |
| TL1550 | B | C | 5G |
| TL1551 | B | C | 5G |
| TL1552 | B | C | 5G |
| TL1553 | B | C | 5G |
| TL1554 | B | C | 5G |
| TL1555 | B | C | 6G |
| TL1556 | B | C | 5H |
| TL1557 | B | C | 5H |
| TL1558 | B | C | 6H |
| TL1559 | B | C | 5H |
| TL1560 | B | C | 5H |
| TL1561 | B | C | 6H |
| TL1562 | B | C | 5H |
| TL1563 | B | C | 5H |
| TL1564 | B | C | 6H |
| TL1565 | B | C | 5H |
| TL1566 | B | C | 5H |
| TL1567 | B | C | 6H |
| TL1568 | B | C | 5H |
| TL1569 | B | C | 5H |
| TL1570 | B | C | 6H |
| TL1571 | B | C | 5H |
| TL1572 | B | C | 5H |
| TL1573 | B | C | 6H |
| TL1574 | B | C | 5H |
| TL1575 | B | C | 5H |
| TL1576 | B | C | 6H |
| TL1577 | B | C | 5I |
| TL1578 | B | C | 5I |
| TL1579 | B | C | 6I |
| TL1580 | B | C | 5I |
| TL1581 | B | C | 5I |
| TL1582 | B | C | 6I |
| TL1583 | B | C | 5I |
| TL1584 | B | C | 5I |
| TL1585 | B | C | 6I |
| TL1586 | B | C | 5I |
| TL1587 | B | C | 5I |
| TL1588 | B | C | 6I |
| TL1589 | B | C | 5I |
| TL1590 | B | C | 5I |
| TL1591 | B | C | 6I |
| TL1592 | B | C | 5I |
| TL1593 | B | C | 5I |
| TL1594 | B | C | 6I |
| TL1595 | B | C | 5I |
| TL1596 | B | C | 5I |
| TL1597 | B | C | 6I |
| TL1598 | B | C | 5I |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| TL1599 | B | C | 5I |
| TL1600 | B | C | 6I |
| TL1601 | B | C | 5J |
| TL1602 | B | C | 5J |
| TL1603 | B | C | 6J |
| TL1604 | B | C | 5J |
| TL1605 | B | C | 5J |
| TL1606 | B | C | 5J |
| TL1607 | B | C | 5J |
| TL1608 | B | C | 5J |
| TL1609 | B | C | 5J |
| TL1610 | B | C | 5J |
| TL1611 | B | C | 5J |
| TL1612 | B | C | 5J |
| TL1613 | B | C | 5J |
| TL1614 | B | C | 5J |
| TL1615 | B | C | 5J |
| TL1616 | B | C | 5J |
| TL1617 | B | C | 5J |
| TL1618 | B | C | 5J |
| TL1619 | B | C | 5J |
| TL1620 | B | C | 5J |
| TL1621 | B | C | 5J |
| TL1622 | B | C | 5J |
| TL1623 | B | C | 4J |
| TL1624 | B | C | 4J |
| TL1625 | B | C | 4J |
| TL1626 | B | C | 4J |
| TL1627 | B | C | 4J |
| TL1628 | B | C | 4J |
| TL1629 | B | C | 4J |
| TL1630 | B | C | 4J |
| TL1631 | B | C | 4J |
| TL1632 | B | C | 4J |
| TL1633 | B | C | 4J |
| TL1634 | B | C | 4J |
| TL1635 | B | C | 4J |
| TL1636 | B | C | 4J |
| TL1637 | B | C | 4J |
| TL1638 | B | C | 4J |
| TL1639 | B | C | 4J |
| TL1640 | B | C | 4J |
| TL1641 | B | C | 4J |
| TL1642 | B | C | 4J |
| TL1643 | B | C | 4J |
| TL1644 | B | C | 3J |
| TL1645 | B | C | 3J |
| TL1646 | B | C | 3J |
| TL1647 | B | C | 3J |
| TL1648 | B | C | 3J |
| TL1649 | B | C | 3J |
| TL1650 | B | C | 3J |
| TL1651 | B | C | 3J |
| TL1652 | B | C | 3J |
| TL1653 | B | C | 3J |
| TL1654 | B | C | 3J |
| TL1655 | B | C | 3J |
| TL1656 | B | C | 3J |
| TL1657 | B | C | 3J |
| TL1658 | B | C | 3J |
| TL1659 | B | C | 2J |
| TL1660 | B | C | 3J |
| TL1661 | B | C | 3J |
| TL1662 | B | C | 2J |
| TL1663 | B | C | 3J |
| TL1664 | B | C | 3J |
| TL1665 | B | C | 2J |
| TL1666 | B | C | 3I |
| TL1667 | B | C | 3I |
| TL1668 | B | C | 2I |
| TL1669 | B | C | 3I |
| TL1670 | B | C | 3I |
| TL1671 | B | C | 2I |
| TL1672 | B | C | 3I |
| TL1673 | B | C | 3I |
| TL1674 | B | C | 2I |
| TL1675 | B | C | 3I |
| TL1676 | B | C | 3I |
| TL1677 | B | C | 2I |
| TL1678 | B | C | 3I |
| TL1679 | B | C | 3I |
| TL1680 | B | C | 2I |
| TL1681 | B | C | 3I |
| TL1682 | B | C | 3I |
| TL1683 | B | C | 2I |
| TL1684 | B | C | 3I |
| TL1685 | B | C | 3I |
| TL1686 | B | C | 2I |
| TL1687 | B | C | 3I |
| TL1688 | B | C | 3I |
| TL1689 | B | C | 2I |
| TL1690 | B | C | 3H |
| TL1691 | B | C | 3H |

| REF.NO. | LOCATION | | |
|---|---|---|---|
| TL1692 | B | C | 2H |
| TL1693 | B | C | 3H |
| TL1694 | B | C | 3H |
| TL1695 | B | C | 2H |
| TL1696 | B | C | 3H |
| TL1697 | B | C | 3H |
| TL1698 | B | C | 2H |
| TL1699 | B | C | 3H |
| TL1700 | B | C | 3H |
| TL1701 | B | C | 2H |
| TL1702 | B | C | 3H |
| TL1703 | B | C | 3H |
| TL1704 | B | C | 2H |
| TL1705 | B | C | 3H |
| TL1706 | B | C | 3H |
| TL1707 | B | C | 2H |
| TL1708 | B | C | 3H |
| TL1801 | A | C | 3B |
| TL2002 | A | C | 5F |
| TL2007 | A | C | 5F |
| TL2008 | A | C | 5F |
| TL2009 | A | C | 5F |
| TL2012 | A | C | 4E |
| TL2013 | A | C | 5E |
| TL2014 | A | C | 5E |
| TL2015 | A | C | 5E |
| TL2016 | A | C | 5E |
| TL2017 | A | C | 5E |
| TL2018 | A | C | 3F |
| TL2021 | A | C | 3F |
| TL2022 | A | C | 3E |
| TL2023 | A | C | 3E |
| TL2024 | A | C | 3E |
| TL2025 | A | C | 3E |
| TL2026 | A | C | 3E |
| TL2027 | A | C | 3E |
| TL2028 | A | C | 3E |
| TL2029 | A | C | 3E |
| TL2041 | A | C | 5F |
| TL2042 | A | C | 5F |
| TL2043 | A | C | 3F |
| TL2044 | A | C | 3F |
| TL2045 | A | C | 3F |
| TL2046 | A | C | 3E |
| TL2047 | A | C | 3E |
| TL2048 | A | C | 3E |
| TL2049 | A | C | 3F |
| TL2050 | A | C | 3F |
| TL2051 | A | C | 3F |
| TL2052 | A | C | 3E |
| TL2053 | A | C | 3F |
| TL2054 | A | C | 3F |
| TL2055 | A | C | 3F |
| TL2056 | A | C | 3F |
| TL2057 | A | C | 3F |
| TL2058 | A | C | 3F |
| TL2059 | A | C | 3F |
| TL2060 | A | C | 3E |
| TL2061 | A | C | 3F |
| TL2062 | A | C | 3E |
| TL2063 | A | C | 3F |
| TL2064 | A | C | 3F |
| TL2065 | A | C | 3F |
| TL2066 | A | C | 3F |
| TL2067 | A | C | 3F |
| TL2068 | A | C | 3F |
| TL2069 | A | C | 3F |
| TL2070 | A | C | 3F |
| TL2071 | A | C | 5E |
| TL2072 | A | C | 5F |
| TL2073 | A | C | 5F |
| TL2074 | A | C | 5F |
| TL2075 | A | C | 5G |
| TL2076 | A | C | 5G |
| TL2077 | A | C | 5G |
| TL2078 | A | C | 5G |
| TL3501 | B | C | 7B |
| TL3502 | A | C | 8B |
| TL4021 | A | C | 3D |
| TL4022 | A | C | 3D |
| TL4023 | A | C | 4D |
| TL4024 | A | C | 4D |
| TL4025 | A | C | 4D |
| TL4031 | A | C | 5C |
| TL4032 | A | C | 5C |
| TL4033 | A | C | 5C |
| TL4034 | A | C | 5D |
| TL4035 | A | C | 5D |
| TL4036 | A | C | 4D |
| TL4041 | A | C | 3C |
| TL4042 | A | C | 5D |
| TL4043 | A | C | 5D |
| TL4044 | A | C | 4D |

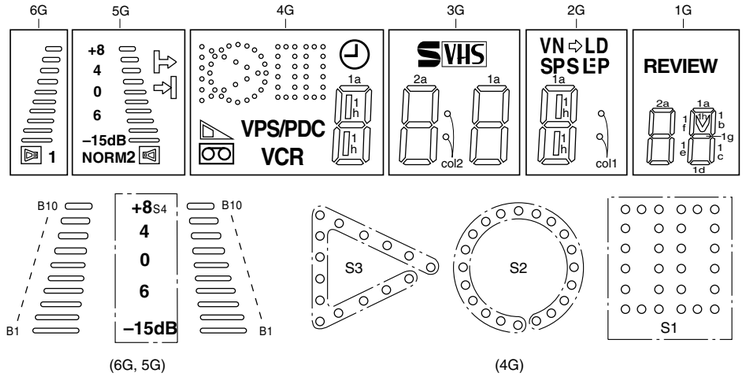
| REF.NO. | LOCATION | | |
|---|---|---|---|
| TL4045 | A | C | 4D |
| TL4046 | A | C | 5D |
| TL4047 | A | C | 5D |
| TL4048 | A | C | 4D |
| X1001 | A | C | 8H |
| X1002 | A | C | 7I |
| X2001 | A | C | 6F |
| X2003 | A | C | 4E |
| X3101 | A | C | 3B |

## — COMPONENT SIDE(A) —

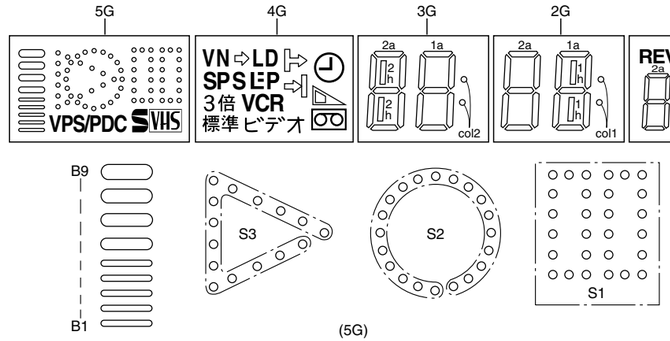


## 4.32 FDP GRID ASSIGNMENT AND ANODE CONNECTION

### [A] (FDP with audio level indicator)




### [B] (FDP without audio level indicator)




### ANODE CONNECTION [A]

| | 6G | 5G | 4G | 3G | 2G | 1G |
|---|---|---|---|---|---|---|
| P 1 | — | ⇨ | S2 | 1a | 1a | 1a |
| P 2 | — | ⇦ | S1 | 1b | 1b | 1b |
| P 3 | — | S4 | S3 | 1f | 1f | 1f |
| P 4 | — | NORM | VPS/PDC | 1g | 1g | 1g |
| P 5 | 1 | 2 | 🕘 | 1c | 1c | 1c |
| P 6 | ▶ | ◀ | ◢ | 1e | 1e | 1e |
| P 7 | B10 | B10 | 📼 | 1d | 1d | 1d |
| P 8 | B9 | B9 | VCR | col2 | 1h | 1h |
| P 9 | B8 | B8 | 1a | 2a | col1 | 2a |
| P10 | B7 | B7 | 1b | 2b | ⇨ | 2b |
| P11 | B6 | B6 | 1f | 2f | VN | 2f |
| P12 | B5 | B5 | 1g | 2g | LD | 2g |
| P13 | B4 | B4 | 1c | 2c | SP | 2c |
| P14 | B3 | B3 | 1e | 2e | S (SEP) | 2e |
| P15 | B2 | B2 | 1d | 2d | = (SEP) | 2d |
| P16 | B1 | B1 | 1h | SVHS | LP (SEP) | REVIEW |

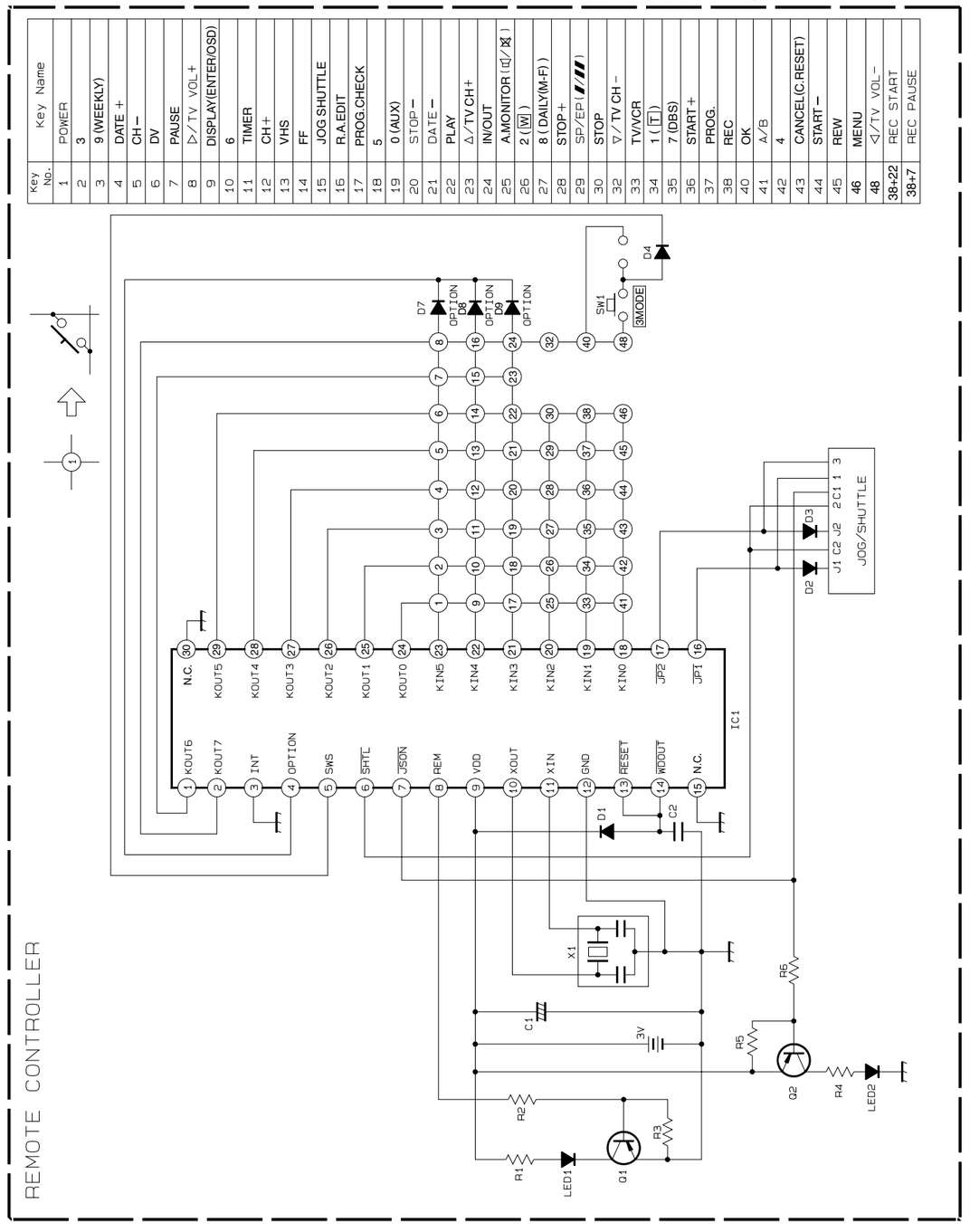
### ANODE CONNECTION [B]

| | 5G | 4G | 3G | 2G | 1G |
|---|---|---|---|---|---|
| P 1 | S2 | ⇨ | 1a | 1a | 1a |
| P 2 | S1 | ⇦ | 1b | 1b | 1b |
| P 3 | S3 | 3倍 | 1f | 1f | 1f |
| P 4 | VPS/PDC | 標準 | 1g | 1g | 1g |
| P 5 | SVHS | 🕘 | 1c | 1c | 1c |
| P 6 | — | ◢ | 1e | 1e | 1e |
| P 7 | — | 📼 | 1d | 1d | 1d |
| P 8 | B9 | VCR | col2 | 1h | 1h |
| P 9 | B8 | ビデオ | 2a | 2a | 2a |
| P10 | B7 | ⇨ | 2b | 2b | 2b |
| P11 | B6 | VN | 2f | 2f | 2f |
| P12 | B5 | LD | 2g | 2g | 2g |
| P13 | B4 | SP | 2c | 2c | 2c |
| P14 | B3 | S (SEP) | 2e | 2e | 2e |
| P15 | B2 | = (SEP) | 2d | 2d | 2d |
| P16 | B1 | LP (SEP) | 2h | col1 | REVIEW |

## 4.33 REMOTE CONTROL SCHEMATIC DIAGRAM

NOTES:
1. All parts shown in this schematic are critical for safety.
2. This schematic is only for reference.
   Avoid replacing individual parts.
   Replace the entire unit only.

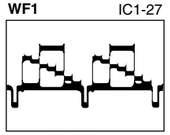
| Key No. | Key Name |
|---|---|
| 1 | POWER |
| 2 | 3 |
| 3 | 9 (WEEKLY) |
| 4 | DATE + |
| 5 | CH – |
| 6 | DV |
| 7 | PAUSE |
| 8 | ▷/TV VOL+ |
| 9 | DISPLAY(ENTER/OSD) |
| 10 | 6 |
| 11 | TIMER |
| 12 | CH+ |
| 13 | VHS |
| 14 | FF |
| 15 | JOG.SHUTTLE |
| 16 | R.A.EDIT |
| 17 | PROG.CHECK |
| 18 | 5 |
| 19 | 0 (AUX) |
| 20 | STOP – |
| 21 | DATE – |
| 22 | PLAY |
| 23 | △/CH+ |
| 24 | IN/OUT |
| 25 | A.MONITOR (d/⊠) |
| 26 | 2 (W) |
| 27 | 8 ( DAILY(M-F) ) |
| 28 | STOP+ |
| 29 | SP/EP(▶/▶▶) |
| 30 | STOP |
| 32 | ▽/TV CH – |
| 33 | TV/VCR |
| 34 | 1 (T) |
| 35 | 7 (DBS) |
| 36 | START + |
| 37 | PROG. |
| 38 | REC |
| 40 | OK |
| 41 | A/B |
| 42 | 4 |
| 43 | CANCEL(C.RESET) |
| 44 | START – |
| 45 | REW |
| 46 | MENU |
| 48 | ◁/TV VOL– |
| 38+22 | REC START |
| 38+7 | REC PAUSE |



## 4.34 WAVEFORMS

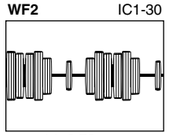
### < VIDEO >

**WF1** IC1-27



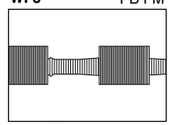
PB 2.3 Vp-p
50 mV/20 µsec/DIV

**WF2** IC1-30



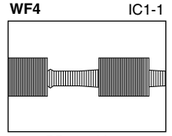
PB 0.72 Vp-p
20 mV/20 µsec/DIV

**WF3** TP106 PB FM



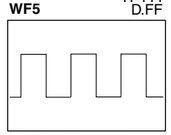
PB 1.2 Vp-p
50 mV/5 msec/DIV

**WF4** IC1-1



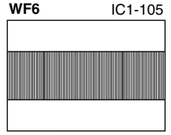
PB 1.2 Vp-p
50 mV/5 msec/DIV

**WF5** TP111 D.FF



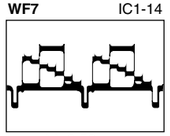
REC/PB 4.6 Vp-p
0.1 V/10 msec/DIV

**WF6** IC1-105



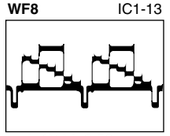
REC 2.4 Vp-p
0.1 V/1 msec/DIV

**WF7** IC1-14



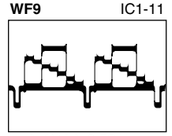
PB 0.56 Vp-p
20 mV/20 µsec/DIV

**WF8** IC1-13



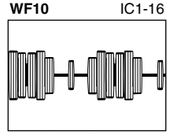
REC/PB 0.56 Vp-p
20 mV/20 µsec/DIV

**WF9** IC1-11



REC/PB 0.56 Vp-p
20 mV/20 µsec/DIV

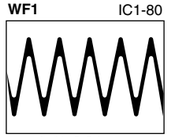
**WF10** IC1-16



REC 0.76 Vp-p
20 mV/20 µsec/DIV

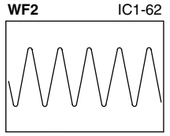
### < AUDIO >

**WF1** IC1-80



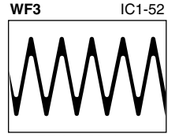
REC 0.24 Vp-p
5 mV/0.5 msec/DIV

**WF2** IC1-62



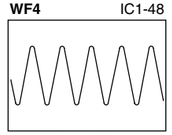
REC/PB 1.0 Vp-p
20 mV/0.5 msec/DIV

**WF3** IC1-52



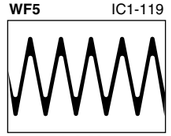
REC 0.22 Vp-p
2 mV/0.5 msec/DIV

**WF4** IC1-48



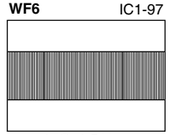
PB 0.76 Vp-p
20 mV/0.5 msec/DIV

**WF5** IC1-119



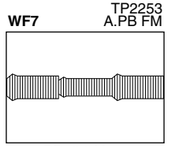
REC 0.96 Vp-p
20 mV/0.5 msec/DIV

**WF6** IC1-97



REC 1.5 Vp-p
50 mV/5 msec/DIV

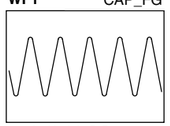
**WF7** TP2253 A.PB FM



PB 0.6 Vp-p
50 mV/5 msec/DIV

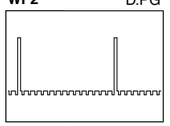
### < SYSCON >

**WF1** CN3003-2 CAP_FG



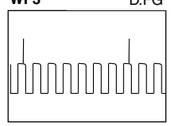
REC/PB 3.2 Vp-p
50 mV/0.5 msec/DIV

**WF2** CN3001-4 D.PG



REC/PB 4.8 Vp-p
0.1 V/10 msec/DIV

**WF3** CN3001-5 D.FG

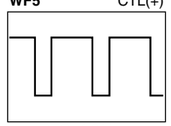


REC/PB 4.6 Vp-p
0.1 V/10 msec/DIV

**WF4** TP4001 CTL.P

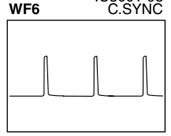
PB 2.3 Vp-p
50 mV/10 msec/DIV

**WF5** IC3001-1 CTL(+)



REC 4.0 Vp-p
0.1 V/10 msec/DIV

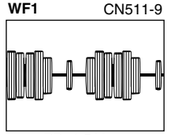
**WF6** IC3001-98 C.SYNC



REC/PB 4.2 Vp-p
0.1 V/20 µsec/DIV

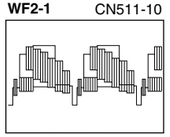
### < S-SUB >

**WF1** CN511-9



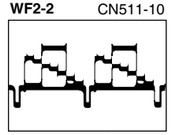
PB 1.5 Vp-p
50 mV/20 µsec/DIV

**WF2-1** CN511-10



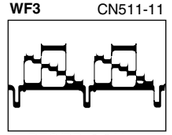
REC 1.8 Vp-p
50 mV/20 µsec/DIV

**WF2-2** CN511-10



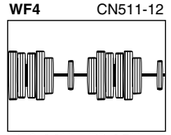
REC/PB 1.8 Vp-p
50 mV/20 µsec/DIV

**WF3** CN511-11



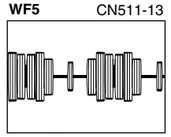
REC/PB 0.8 Vp-p
20 mV/20 µsec/DIV

**WF4** CN511-12



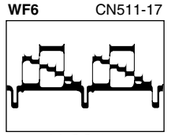
REC 0.6 Vp-p/PB 0.7 V p-p
20 mV/20 µsec/DIV

**WF5** CN511-13



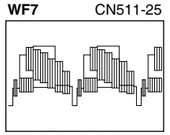
PB 0.7 Vp-p
20 mV/20 µsec/DIV

**WF6** CN511-17



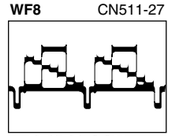
PB 2.2 Vp-p
50 mV/20 µsec/DIV

**WF7** CN511-25



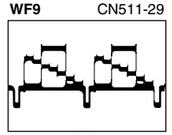
REC/PB 2.4 Vp-p
50 mV/20 µsec/DIV

**WF8** CN511-27



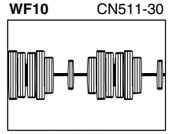
REC/PB 0.6 Vp-p
20 mV/20 µsec/DIV

**WF9** CN511-29



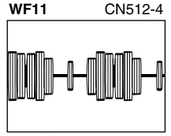
PB 0.6 Vp-p
20 mV/20 µsec/DIV

**WF10** CN511-30



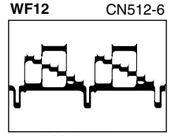
REC 0.76 Vp-p
20 mV/20 µsec/DIV

**WF11** CN512-4



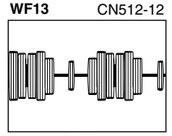
REC/PB 1.5 Vp-p
50 mV/20 µsec/DIV

**WF12** CN512-6



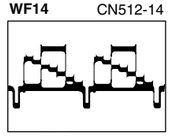
REC/PB 2.3 Vp-p
50 mV/20 µsec/DIV

**WF13** CN512-12



REC 0.7 Vp-p
20 mV/20 µsec/DIV

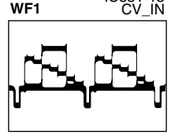
**WF14** CN512-14



REC 1.0 Vp-p
20 mV/20 µsec/DIV

### < ON SCREEN >

**WF1** IC851-15 CV_IN

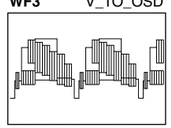


REC/PB 2.0 Vp-p
50 mV/20 µsec/DIV

**WF2** IC851-13 CVOUT

REC/PB 2.0 Vp-p
50 mV/20 µsec/DIV

**WF3** CN851-14 V_TO_OSD



REC/PB 2.4 Vp-p
50 mV/20 µsec/DIV

# 4.35 VOLTAGE CHARTS

### <SW REGULATOR>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC5101 | | |
| 1 | 7.9 | 7.9 |
| 2 | 7.9 | 7.9 |
| 3 | 87.4 | 87.4 |
| 4 | 16.1 | 16.1 |
| 5 | 7.8 | 0 |
| IC5301 | | |
| 1 | 2.4 | 2.4 |
| 2 | 0 | 0 |
| 3 | 10.6 | 10.6 |
| CN5201 | | |
| 1 | -19.3 | -19.3 |
| 2 | 0 | 0 |
| 3 | -15.6 | -15.6 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 2.2 | 2.2 |
| 7 | 0 | |
| 8 | 43.3 | 43.3 |
| 9 | 12.3 | 12.3 |
| 10 | 4.3 | 4.3 |
| 11 | 4.3 | 4.3 |
| 12 | 31.7 | 31.7 |
| 13 | 4.3 | 4.3 |
| 14 | -28.3 | -28.3 |
| 15 | 7.2 | 7.2 |
| 16 | -7.2 | -7.2 |
| 17 | 6.4 | 6.4 |
| 18 | 6.4 | 6.4 |
| 19 | 19.1 | 19.1 |
| CN5324 | | |
| 1 | 6.7 | 6.7 |
| 2 | 0 | 0 |
| 3 | 7.1 | 7.1 |
| 4 | 5.1 | 5.1 |
| 5 | 0 | 0 |
| CN5325 | | |
| 1 | 11.2 | 11.2 |
| 2 | 0 | 0 |

### <REGULATOR>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC5321 | | |
| 1 | 4.3 | 4.3 |
| 2 | 3.2 | 3.2 |
| 3 | 0 | 0 |
| 4 | 2.6 | 2.6 |
| CN5301 | | |
| 1 | 21.4 | 21.4 |
| 2 | 6.4 | 6.4 |
| 3 | 6.4 | 6.4 |
| 4 | -7.2 | -7.2 |
| 5 | 7.2 | 7.2 |
| 6 | -28.3 | -28.3 |
| 7 | 4.3 | 4.3 |
| 8 | 31.7 | 31.7 |
| 9 | 4.3 | 4.3 |
| 10 | 4.3 | 4.3 |
| 11 | 12.3 | 12.3 |
| 12 | 43.3 | 43.3 |
| 13 | 0 | 0 |
| 14 | 2.2 | 2.2 |
| 15 | 0 | 0 |
| 16 | 0 | 0 |
| 17 | -15.6 | -15.6 |
| 18 | 0 | 0 |
| 19 | -19.3 | -19.3 |
| CN5321 | | |
| 1 | 12.2 | 12.2 |
| 2 | 11.6 | 11.6 |
| 3 | 11.5 | 11.5 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | -19.3 | -19.3 |
| 7 | -28.4 | -28.4 |
| 8 | -15.8 | -15.8 |
| 9 | 0 | 0 |
| 10 | 4.8 | 4.8 |
| 11 | 0 | 0 |
| 12 | 4.8 | 4.8 |
| 13 | 0 | 0 |
| 14 | 19.0 | 19.0 |
| 15 | 5.0 | 5.0 |
| CN5322 | | |
| 1 | 5.6 | 5.6 |
| 2 | 43.3 | 43.3 |
| 3 | 5.0 | 5.0 |
| 4 | 4.9 | 4.9 |
| 5 | -7.3 | -7.3 |
| 6 | 12.2 | 12.2 |
| 7 | 11.4 | 11.4 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 31.9 | 31.9 |
| CN5323 | | |
| 1 | -7.2 | -7.2 |
| 2 | 5.1 | 5.1 |
| 3 | 0 | 0 |
| 4 | 3.2 | 3.2 |
| 5 | 3.2 | 3.2 |
| 6 | 0 | 0 |
| 7 | 3.2 | 3.2 |
| 8 | 3.2 | 3.2 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |

### <VIDEO/AUDIO>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC1 | | |
| 1 | 4.2 | 2.1 |
| 2 | 2.8 | 2.8 |
| 3 | 2.6 | 2.6 |
| 4 | 1.9 | 1.4 |
| 5 | 1.9 | 1.4 |
| 6 | 2.4 | 2.4 |
| 7 | 2.1 | 0.7 |
| 8 | 0 | 0 |
| 9 | 2.7 | 2.7 |
| 10 | 2.2 | 2.2 |
| 11 | 3.1 | 3.1 |
| 12 | 2.8 | 2.8 |
| 13 | 3.1 | 3.1 |
| 14 | 3.5 | 2.4 |
| 15 | 0 | 0 |
| 16 | 2.8 | 2.8 |
| 17 | 1.5 | 1.5 |
| 18 | 2.8 | 2.8 |
| 19 | 1.9 | 1.9 |
| 20 | 0 | 2.8 |
| 21 | 0 | 1.9 |
| 22 | 2.8 | 2.8 |
| 23 | 3.1 | 2.9 |
| 24 | 4.8 | 4.8 |
| 25 | 0.3 | 0.3 |
| 26 | 0 | 0 |
| 27 | 1.3 | 2.3 |
| 28 | 2.3 | 2.3 |
| 29 | 1.9 | 1.9 |
| 30 | 2.1 | 2.1 |
| 31 | 0 | 0 |
| 32 | 2.6 | 2.6 |
| 33 | 4.9 | 4.9 |
| 34 | 2.7 | 2.2 |
| 35 | 4.8 | 4.8 |
| 36 | 2.6 | 2.6 |
| 37 | 2.3 | 2.3 |
| 38 | - | - |
| 39 | 1.2 | 1.2 |
| 40 | - | - |
| 41 | 2.5 | 2.5 |
| 42 | - | - |
| 43 | 0 | 0 |
| 44 | 2.1 | 2.1 |
| 45 | 4.6 | 4.6 |
| 46 | 4.2 | 4.2 |
| 47 | 2.9 | 2.9 |
| 48 | 2.6 | 2.6 |
| 49 | 4.9 | 4.9 |
| 50 | 2.5 | 2.5 |
| 51 | 2.8 | 2.8 |
| 52 | 2.3 | 2.3 |
| 53 | 2.3 | 2.3 |
| 54 | 2.5 | 2.5 |
| 55 | 2.1 | 2.1 |
| 56 | 1.4 | 1.4 |
| 57 | 2.3 | 2.3 |
| 58 | 8.4 | 8.4 |
| 59 | 4.6 | 4.6 |
| 60 | 4.2 | 4.2 |
| 61 | 4.2 | 4.2 |
| 62 | 4.2 | 4.2 |
| 63 | 2.3 | 2.3 |
| 64 | 2.3 | 2.3 |
| 65 | 1.4 | 1.4 |
| 66 | 2.8 | 3.2 |
| 67 | 4.2 | 4.2 |
| 68 | 4.2 | 4.2 |
| 69 | 2.3 | 2.3 |
| 70 | 0 | 0 |
| 71 | 0.3 | 0.3 |
| 72 | 1.2 | 1.2 |
| 73 | 0.2 | 0.2 |
| 74 | 2.2 | 2.2 |
| 75 | 2.4 | 2.4 |
| 76 | 0 | 0 |
| 77 | 2.5 | 2.5 |
| 78 | 0.3 | 0.3 |
| 79 | 1.2 | 1.2 |
| 80 | 0.2 | 0.2 |
| 81 | 2.2 | 2.2 |
| 82 | 0.7 | 0.7 |
| 83 | 0 | 0 |
| 84 | 2.3 | 2.3 |
| 85 | 2.3 | 2.3 |
| 86 | 2.2 | 2.2 |
| 87 | 1.5 | 1.5 |
| 88 | 2.2 | 2.2 |
| 89 | 2.2 | 2.2 |
| 90 | 2.3 | 2.3 |
| 91 | 0.1 | 0.1 |
| 92 | 0 | 0 |
| 93 | 0 | 2.6 |
| 94 | 0 | 0 |
| 95 | 0 | 0 |
| 96 | 2.4 | 2.4 |
| 97 | 2.7 | 2.3 |
| 98 | 2.4 | 2.4 |
| 99 | 4.9 | 4.9 |
| 100 | 4.9 | 4.9 |
| 101 | 0 | 0 |
| 102 | 0 | 0 |
| 103 | 0 | 0 |
| 104 | 2.4 | 2.4 |
| 105 | 2.3 | 2.3 |
| 106 | 2.3 | 2.3 |
| 107 | 4.9 | 4.9 |
| 108 | 0 | 0 |
| 109 | 0 | 0 |
| 110 | 0 | 0 |
| 111 | 0 | 2.5 |
| 112 | 2.6 | 2.6 |
| 113 | 1.7 | 0.9 |
| 114 | 0 | 0 |
| 115 | 2.5 | 2.5 |
| 116 | 2.5 | 2.5 |
| 117 | 2.5 | 2.5 |
| 118 | 0 | 0 |
| 119 | 2.4 | 2.4 |
| 120 | 4.6 | 4.6 |
| CN1 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 2.3 | 2.3 |
| 6 | 2.3 | 2.3 |
| 7 | 2.3 | 2.3 |
| 8 | 2.3 | 2.3 |
| 9 | 2.7 | 2.3 |
| 10 | 2.7 | 2.3 |
| 11 | 2.7 | 2.3 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| CN2001 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 2.1 | 2.4 |
| 7 | 2.4 | 2.4 |
| CN2002 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |

### <SYSCON>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC3001 | | |
| 1 | 2.7 | 2.7 |
| 2 | 0 | 0 |
| 3 | 1.8 | 2.4 |
| 4 | 2.4 | 2.4 |
| 5 | 0 | 0.6 |
| 6 | 2.5 | 2.5 |
| 7 | 2.4 | 2.4 |
| 8 | 2.4 | 2.4 |
| 9 | 4.9 | 4.9 |
| 10 | 4.8 | 4.8 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 4.3 | 4.3 |
| 15 | 4.4 | 4.4 |
| 16 | 0.6 | 0.6 |
| 17 | 2.7 | 2.7 |
| 18 | 5.0 | 5.0 |
| 19 | 0 | 0 |
| 20 | 4.5 | 4.5 |
| 21 | 0 | 2.5 |
| 22 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 4.8 | 4.8 |
| 25 | 0 | 0 |
| 26 | 4.9 | 4.9 |
| 27 | 4.9 | 4.9 |
| 28 | 4.8 | 4.8 |
| 29 | 4.8 | 4.8 |
| 30 | 0 | 0 |
| 31 | 0 | 0 |
| 32 | 0 | 0 |
| 33 | 0 | 0 |
| 34 | 0 | 0 |
| 35 | 0 | 0 |
| 36 | 0 | 0 |
| 37 | 0 | 0 |
| 38 | 1.9 | 1.9 |
| 39 | 4.2 | 4.2 |
| 40 | 0 | 0 |
| 41 | 4.7 | 4.7 |
| 42 | 4.5 | 4.5 |
| 43 | 0 | 0 |
| 44 | 0 | 0 |
| 45 | 4.8 | 4.8 |
| 46 | 4.7 | 4.7 |
| 47 | 0 | 0 |
| 48 | 4.8 | 4.8 |
| 49 | 4.2 | 4.2 |
| 50 | 4.6 | 4.6 |
| 51 | 4.8 | 4.8 |
| 52 | 3.4 | 1.1 |
| 53 | 4.3 | 4.3 |
| 54 | - | - |
| 55 | - | - |
| 56 | 5.1 | 0 |
| 57 | 0 | 0 |
| 58 | 5.2 | 0 |
| 59 | 0 | 0 |
| 60 | 0 | 0 |
| 61 | 0 | 0 |
| 62 | 0 | 0 |
| 63 | 0 | 0 |
| 64 | - | - |
| 65 | - | - |
| 66 | - | - |
| 67 | - | - |
| 68 | 0 | 0 |
| 69 | - | - |
| 70 | 4.8 | 4.8 |
| 71 | 4.8 | 4.8 |
| 72 | 4.8 | 4.8 |
| 73 | 4.8 | 4.8 |
| 74 | 0 | 0 |
| 75 | 4.5 | 4.5 |
| 76 | 4.5 | 4.5 |
| 77 | 0 | 0 |
| 78 | 0 | 0 |
| 79 | 4.8 | 4.8 |
| 80 | 0 | 0 |
| 81 | 4.8 | 4.8 |
| 82 | 4.8 | 4.8 |
| 83 | 2.5 | 2.5 |
| 84 | 0 | 0 |
| 85 | 0 | 0 |
| 86 | 4.5 | 4.5 |
| 87 | 4.8 | 0 |
| 88 | 4.8 | 4.8 |
| 89 | 0 | 0 |
| 90 | 0 | 0 |
| 91 | 2.7 | 2.8 |
| 92 | 0 | 0 |
| 93 | 5.2 | 5.2 |
| 94 | 0 | 4.8 |
| 95 | 0 | 0 |
| 96 | 0 | 0 |
| 97 | 0.5 | 0.5 |
| 98 | 0.4 | 0.4 |
| 99 | 0 | 2.7 |
| 100 | 2.5 | 2.5 |
| 101 | 2.5 | 2.5 |
| 102 | 1.2 | 1.2 |
| 103 | 0 | 0 |
| 104 | 0 | 0 |
| 105 | 4.8 | 4.8 |
| 106 | 4.8 | 4.8 |
| 107 | 0.1 | 0.1 |
| 108 | 1.5 | 1.5 |
| 109 | 4.8 | 4.8 |
| 110 | 0 | 0 |
| 111 | 0 | 0 |
| 112 | 2.4 | 2.4 |
| IC3002 | | |
| 1 | 4.8 | 4.8 |
| 2 | 4.8 | 4.8 |
| 3 | 0 | 0 |
| IC3003 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 4.5 | 4.5 |
| 6 | 4.5 | 4.5 |
| 7 | 0 | 0 |
| 8 | 4.9 | 4.9 |
| IC3004 | | |
| 1 | 12.2 | 12.2 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 12.2 | 12.2 |
| 6 | 12.2 | 12.2 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| CN3001 | | |
| 1 | 11.6 | 11.6 |
| 2 | 0 | 0 |
| 3 | 1.4 | 1.4 |
| 4 | 0.1 | 0.1 |
| 5 | 1.5 | 1.5 |
| CN3002 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| CN3003 | | |
| 1 | 0 | 0 |
| 2 | 2.4 | 2.4 |
| 3 | 2.5 | 2.4 |
| 4 | 4.9 | 4.9 |
| 5 | 0 | 0 |
| 6 | 4.8 | 4.8 |
| 7 | - | - |
| 8 | 11.4 | 11.4 |
| CN3004 | | |
| 1 | 4.9 | 4.9 |
| 2 | 4.9 | 4.9 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| CN3011 | | |
| 1 | 4.9 | 4.9 |
| 2 | 4.9 | 4.9 |
| 3 | 4.3 | 4.3 |
| 4 | 4.8 | 4.8 |
| 5 | 4.4 | 3.7 |
| 6 | 4.2 | 4.2 |
| 7 | 4.8 | 4.8 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | -19.3 | -19.3 |
| 11 | -15.8 | -15.8 |
| 12 | -28.4 | -28.4 |
| 13 | 3.8 | 3.8 |
| 14 | 3.5 | 3.5 |
| 15 | 3.8 | 3.8 |
| 16 | 3.5 | 3.5 |
| 17 | 4.8 | 4.8 |
| 18 | 0 | 0 |
| CN3014 | | |
| 1 | 3.8 | 3.8 |
| 2 | 2.8 | 2.8 |
| 3 | 0 | 0 |
| 4 | 3.0 | 3.0 |
| 5 | 3.0 | 3.0 |
| 6 | 0 | 0 |

### <SUB CPU>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC3301 | | |
| 1 | 0 | 4.8 |
| 2 | 4.8 | 4.8 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 4.8 | 4.8 |
| 8 | 3.5 | 3.5 |
| 9 | 4.0 | 4.0 |
| 10 | 0 | 0 |
| 11 | 4.8 | 4.8 |
| 12 | 0 | 0 |
| 13 | 4.8 | 4.8 |
| 14 | 0 | 0 |
| 15 | 2.8 | 2.8 |
| 16 | 0 | 0 |
| 17 | 4.7 | 4.7 |
| 18 | 4.8 | 4.8 |
| 19 | 4.8 | 4.8 |
| 20 | 4.8 | 4.8 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 4.8 | 4.8 |
| 24 | 0 | 0 |
| 25 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 28 | 0 | 0 |
| 29 | 0 | 0 |
| 30 | 0 | 0 |
| 31 | 0 | 0 |
| 32 | 0 | 0 |
| 33 | 0 | 0 |
| 34 | 4.8 | 4.8 |
| 35 | 4.8 | 4.8 |
| 36 | 3.9 | 3.9 |
| 37 | 3.7 | 3.7 |
| 38 | 0 | 3.8 |
| 39 | 3.7 | 3.7 |
| 40 | 4.8 | 0 |
| 41 | 4.8 | 0 |
| 42 | 4.8 | 0 |
| 43 | 0 | 0 |
| 44 | 0 | 0 |
| 45 | 0 | 0 |
| 46 | 0 | 0 |
| 47 | 0 | 0 |
| 48 | 0 | 0 |
| 49 | 0 | 0 |
| 50 | 0 | 0 |
| 51 | 0 | 0 |
| 52 | 0 | 0 |
| 53 | 0 | 0 |
| 54 | 0 | 0 |
| 55 | 0 | 0 |
| 56 | 0 | 0 |
| 57 | 0 | 0 |
| 58 | 0 | 0 |
| 59 | 4.8 | 4.8 |
| 60 | 4.8 | 4.8 |
| 61 | 0 | 0 |
| 62 | 0 | 0 |
| 63 | 0 | 0 |
| 64 | 0.1 | 0.1 |
| 65 | 0 | 0 |
| 66 | 0 | 0 |
| 67 | 0 | 0 |
| 68 | 4.8 | 4.8 |
| 69 | - | - |
| 70 | - | - |
| 71 | 0 | 0 |
| 72 | 0 | 0 |
| 73 | 4.8 | 4.8 |
| 74 | 4.8 | 4.8 |
| 75 | 0 | 0 |
| 76 | 0 | 0 |
| 77 | 0 | 0 |
| 78 | 0 | 0 |
| 79 | 2.9 | 2.9 |
| 80 | 0 | 0 |
| IC3302 | | |
| 1 | 4.8 | 4.8 |
| 2 | 4.3 | 4.3 |
| 3 | 0 | 0 |
| 4 | 4.4 | 3.8 |
| 5 | 4.4 | 3.8 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 2.9 | 2.9 |
| 13 | 4.8 | 4.8 |
| 14 | 2.9 | 2.9 |
| 15 | 4.3 | 4.3 |
| 16 | 4.8 | 4.8 |

### <TUNER>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| CN6701 | | |
| 1 | 0 | 0 |
| 2 | 4.5 | 4.5 |
| 3 | 4.5 | 4.5 |
| 4 | 4.8 | 4.8 |
| 5 | 0.3 | 0.3 |
| 6 | 0.3 | 0.3 |
| 7 | 9.1 | 9.1 |
| 8 | 0 | 0 |
| 9 | 2.1 | 2.1 |

### <VIDEO I/O SW>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC702 | | |
| 1 | 6.4 | 6.4 |
| 2 | 0 | 0 |
| 3 | 6.4 | 6.4 |
| 4 | 0 | 0 |
| 5 | 6.4 | 6.4 |
| 6 | 11.3 | 11.3 |
| 7 | 5.6 | 5.6 |
| 8 | 0 | 0 |
| IC703 | | |
| 1 | 3.1 | 3.1 |
| 2 | 0 | 0 |
| 3 | 3.1 | 3.1 |
| 4 | 0 | 0 |
| 5 | 3.0 | 3.0 |
| 6 | 11.4 | 11.4 |
| 7 | 3.4 | 3.4 |
| 8 | 0 | 0 |
| IC705 | | |
| 1 | 1.7 | 1.7 |
| 2 | 0 | 0 |
| 3 | 2.7 | 2.4 |
| 4 | 0 | 0 |
| 5 | 1.6 | 1.6 |
| 6 | 4.9 | 4.9 |
| 7 | 1.0 | 1.0 |
| 8 | 0 | 0 |
| IC706 | | |
| 1 | 5.6 | 5.6 |
| 2 | 4.9 | 4.9 |
| 3 | 4.9 | 4.9 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| IC707 | | |
| 1 | 4.5 | 4.5 |
| 2 | 2.9 | 2.9 |
| 3 | 5.0 | 5.0 |
| 4 | 1.9 | 1.9 |
| 5 | 1.5 | 1.5 |
| 6 | 2.1 | 2.1 |
| 7 | 2.9 | 2.9 |
| 8 | 0 | 0 |
| 9 | 2.9 | 2.9 |
| 10 | 0 | 0 |
| 11 | 2.5 | 2.5 |
| 12 | 3.1 | 3.1 |
| 13 | 2.9 | 2.9 |
| 14 | 2.2 | 2.2 |
| IC711 | | |
| 1 | 1.4 | 1.4 |
| 2 | 0 | 0 |
| 3 | 2.0 | 1.8 |
| 4 | 4.9 | 4.9 |
| 5 | 1.4 | 1.4 |
| 6 | 4.9 | 0 |
| 7 | 0.6 | 0.6 |
| 8 | 0 | 0 |
| IC712 | | |
| 1 | 2.7 | 2.7 |
| 2 | 0 | 0 |
| 3 | 2.7 | 2.7 |
| 4 | 0 | 4.9 |
| 5 | 0 | 0 |
| 6 | 4.9 | 4.9 |
| 7 | 4.1 | 4.1 |
| 8 | 0 | 0 |
| CN703 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 1.7 | 1.7 |
| 5 | 0 | 0 |
| 6 | 4.1 | 4.1 |
| CN704 | | |
| 1 | 2.8 | 2.8 |
| 2 | 2.9 | 2.9 |
| 3 | 4.3 | 4.3 |
| 4 | 4.4 | 1.4 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 4.8 | 4.8 |
| 10 | 2.2 | 2.2 |
| 11 | 0 | 0 |
| 12 | 2.6 | 2.6 |
| 13 | 0 | 0 |
| 14 | 2.3 | 2.3 |
| 15 | 4.9 | 4.9 |
| 16 | 1.8 | 1.8 |
| 17 | 2.9 | 2.9 |
| 18 | 11.4 | 11.4 |
| 19 | 0 | 0 |
| 20 | 1.2 | 1.2 |

### <AUDIO I/O>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC2601 | | |
| 1 | 0.2 | 0.2 |
| 2 | 0 | 0 |
| 3 | 0.2 | 0.2 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0.3 | 0.3 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 5.6 | 5.6 |
| IC2602 | | |
| 1 | 7.5 | 7.5 |
| 2 | 7.5 | 7.5 |
| 3 | 0.2 | 0.2 |
| 4 | -4.9 | -4.9 |
| 5 | 0 | 0 |
| 6 | 7.5 | 7.5 |
| 7 | 7.5 | 7.5 |
| 8 | 8.2 | 8.2 |
| IC2603 | | |
| 1 | 7.0 | 7.0 |
| 2 | 7.0 | 7.0 |
| 3 | 7.0 | 7.0 |
| 4 | 7.0 | 7.0 |
| 5 | 1.4 | 1.4 |
| 6 | 0 | 0 |
| 7 | 0.3 | 0.3 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 7.0 | 7.0 |
| 12 | 7.0 | 7.0 |
| 13 | 7.0 | 7.0 |
| 14 | 1.6 | 1.6 |
| 15 | 7.0 | 7.0 |
| 16 | 5.6 | 5.6 |
| IC2604 | | |
| 1 | 7.4 | 7.4 |
| 2 | 3.0 | 3.0 |
| 3 | 0.2 | 0 |
| 4 | 0.3 | 0.3 |
| 5 | 0.2 | 0.3 |
| 6 | 3.0 | 3.0 |
| 7 | 7.4 | 7.4 |
| 8 | 8.2 | 8.2 |
| IC2605 | | |
| 1 | 7.5 | 7.5 |
| 2 | 1.5 | 1.5 |
| 3 | 0.3 | 0.3 |
| 4 | 0.3 | 0.3 |
| 5 | 0.3 | 0.3 |
| 6 | 1.5 | 1.5 |
| 7 | 0 | 0 |
| 8 | 8.2 | 8.2 |
| IC2606 | | |
| 1 | 4.5 | 4.5 |
| 2 | 7.0 | 7.0 |
| 3 | 4.6 | 4.6 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0.3 | 0.3 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 4.5 | 4.5 |
| 13 | 4.5 | 4.5 |
| 14 | 0 | 0 |
| 15 | 7.0 | 7.0 |
| 16 | 5.6 | 5.6 |
| IC2607 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 4.3 | 4.3 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 4.3 | 4.3 |
| 15 | 0 | 0 |
| 16 | 5.6 | 5.6 |
| IC2608 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0.3 | 0.3 |
| 5 | 1.2 | 1.2 |
| 6 | 1.6 | 3.4 |
| 7 | 1.6 | 3.5 |
| 8 | 8.2 | 8.2 |
| IC2609 | | |
| 1 | 8.1 | 8.1 |
| 2 | 0 | 0 |
| 3 | 8.1 | 8.1 |
| 4 | 0 | 0 |
| 5 | 4.7 | 4.7 |
| 6 | 0 | 0 |
| 7 | 4.6 | 4.1 |
| 8 | 0 | 0 |
| 9 | 5.3 | 5.3 |
| 10 | 8.2 | 8.2 |
| 11 | 5.3 | 5.3 |
| 12 | 0 | 0 |
| IC2610 | | |
| 1 | 0 | 0 |
| 2 | 4.3 | 4.3 |
| 3 | -0.2 | -0.2 |
| 4 | 5.6 | 5.6 |
| 5 | 5.6 | 5.6 |
| 6 | 0 | 0 |
| 7 | 0.3 | 0.3 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 4.3 | 0 |
| 13 | 0 | 0 |
| 14 | 4.3 | 4.3 |
| 15 | 4.3 | 4.3 |
| 16 | 5.6 | 5.6 |
| CN2601 | | |
| 1 | 0 | 0 |
| 2 | 4.2 | 4.2 |
| 3 | 0 | 0 |
| 4 | 4.2 | 4.2 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |

### <CONNECTION>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| CN501 | | |
| 1 | 2.4 | 2.4 |
| 2 | 0 | 0 |
| 3 | 2.3 | 2.3 |
| 4 | 5.0 | 5.0 |
| 5 | 2.1 | 2.1 |
| 6 | 0.3 | 4.5 |
| 7 | 3.3 | 3.3 |
| 8 | 0 | 0 |
| 9 | 2.8 | 2.8 |
| 10 | 0 | 0 |
| 11 | 4.6 | 4.6 |
| 12 | 4.2 | 4.2 |
| 13 | 0 | 0 |
| 14 | 0.8 | 0.8 |
| 15 | 2.5 | 2.5 |
| 16 | 0 | 0 |
| 17 | 2.5 | 2.5 |
| CN502 | | |
| 1 | 0.3 | 4.5 |
| 2 | 4.2 | 4.2 |
| 3 | 4.6 | 4.6 |
| 4 | 2.4 | 2.4 |
| 5 | 4.9 | 4.9 |
| 6 | 4.9 | 4.9 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 2.3 | 2.3 |
| 10 | 2.1 | 2.1 |
| 11 | 3.3 | 3.3 |
| 12 | 2.9 | 2.9 |
| 13 | 2.8 | 2.8 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 2.4 | 2.1 |
| 17 | 1.3 | 2.3 |
| 18 | 4.8 | 4.8 |
| 19 | 0 | 0 |
| 20 | 0 | 0 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 0 | 0 |
| 25 | 2.3 | 2.3 |
| 26 | 0 | 0 |
| 27 | 2.5 | 2.5 |
| 28 | 0 | 0 |
| 29 | 3.4 | 2.4 |
| 30 | 2.8 | 2.8 |
| CN7501 | | |
| 3 | 2.0 | 2.0 |
| 4 | 0 | 0 |
| 5 | 5.6 | 5.6 |
| 6 | 0 | 0 |
| 7 | 1.3 | 1.3 |
| 8 | 0 | 0 |
| 9 | 1.1 | 1.1 |
| 10 | 0 | 0 |
| 11 | 1.5 | 1.5 |
| 12 | 0 | 0 |
| 13 | 3.3 | 3.3 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| CN7502 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0.7 | 0.7 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| CN7504 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0.2 | 0.2 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| CN7506 | | |
| 1 | 0 | 0 |
| 2 | 2.4 | 2.4 |
| 3 | 0 | 0 |
| 4 | 2.4 | 2.4 |
| 5 | 0 | 0 |
| 6 | 2.3 | 2.3 |
| 7 | 0 | 0 |
| 8 | 1.3 | 1.3 |
| 9 | 0 | 0 |
| 10 | 1.1 | 1.1 |
| 11 | 0 | 0 |
| 12 | 0.7 | 0.7 |
| 13 | 0 | 0 |
| 14 | 0.1 | 0.1 |
| CN7507 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 5.0 | 5.0 |
| 12 | 5.0 | 5.0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 4.9 | 4.9 |
| 16 | 4.9 | 4.9 |
| CN7508 | | |
| 3 | 31.9 | 31.9 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 11.4 | 11.4 |
| 8 | 12.2 | 12.2 |
| 9 | -7.3 | -7.3 |
| 10 | 4.9 | 4.9 |
| 11 | 5.0 | 5.0 |
| 12 | 43.3 | 43.3 |
| 13 | 5.6 | 5.6 |
| CN7509 | | |
| 1 | 0 | 0 |
| 2 | 22.6 | 22.6 |
| 3 | 0 | 0 |
| 4 | 4.8 | 4.8 |
| 5 | 0 | 0 |
| 6 | 4.8 | 4.8 |
| 7 | 0 | 0 |
| 8 | -15.8 | -15.8 |
| 9 | -28.4 | -28.4 |
| 10 | -19.3 | -19.3 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 11.5 | 11.5 |
| 14 | 11.6 | 11.6 |
| 15 | 12.2 | 12.2 |

### <3D DIGITAL/4M>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC1401 | - | - |
| IC1402 | - | - |
| CN1401 | | |
| 1 | 2.4 | 2.4 |
| 2 | 0 | 0 |
| 3 | 2.3 | 2.3 |
| 4 | 5.0 | 5.0 |
| 5 | 2.1 | 2.1 |
| 6 | 0.3 | 4.5 |
| 7 | 3.3 | 3.3 |
| 8 | 0 | 0 |
| 9 | 2.8 | 2.8 |
| 10 | 0 | 0 |
| 11 | 4.6 | 4.6 |
| 12 | 4.2 | 4.2 |
| 13 | 0 | 0 |
| 14 | 0.8 | 0.8 |
| 15 | 2.5 | 2.5 |
| 16 | 0 | 0 |
| 17 | 2.5 | 2.5 |

### <TERMINAL>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC7101 | | |
| 1 | 3.0 | 3.0 |
| 2 | 0 | 0 |
| 3 | 3.1 | 3.1 |
| 4 | 4.3 | 4.3 |
| 5 | 3.0 | 3.0 |
| 6 | 11.4 | 11.4 |
| 7 | 3.4 | 3.4 |
| 8 | 0 | 0 |
| IC7102 | | |
| 1 | 4.9 | 4.9 |
| 2 | 0 | 0 |
| 3 | 4.9 | 4.9 |
| 4 | 4.3 | 4.3 |
| 5 | 5.0 | 5.0 |
| 6 | 11.4 | 11.4 |
| 7 | 6.6 | 6.6 |
| 8 | 0 | 0 |
| IC7103 | | |
| 1 | 0.3 | 0.3 |
| 2 | 1.1 | 1.1 |
| 3 | 1.9 | 1.9 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| IC7106 | | |
| 1 | 0.4 | 0.4 |
| 2 | 1.0 | 1.0 |
| 3 | 1.6 | 1.6 |
| 4 | 0 | 0 |
| 5 | 1.9 | 1.9 |
| 6 | 0 | 0 |
| 7 | 4.8 | 4.8 |
| 8 | 10.8 | 10.8 |
| 9 | 2.0 | 2.0 |
| 10 | 2.2 | 2.2 |
| 11 | 2.0 | 2.0 |
| 12 | 2.0 | 2.0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 2.4 | 2.4 |
| 16 | 4.8 | 4.8 |
| CN7101 | | |
| 3 | 2.0 | 2.0 |
| 4 | 0 | 0 |
| 5 | 5.6 | 5.6 |
| 6 | 0 | 0 |
| 7 | 1.3 | 1.3 |
| 8 | 0 | 0 |
| 9 | 1.1 | 1.1 |
| 10 | 0 | 0 |
| 11 | 1.5 | 1.5 |
| 12 | 0 | 0 |
| 13 | 3.3 | 3.3 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| CN7102 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0.7 | 0.7 |
| 6 | 0 | 0 |
| 7 | 3.3 | 3.3 |
| CN7104 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0.2 | 0.2 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |

### <DEMODULATOR>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC1501 | - | - |
| IC1502 | - | - |
| IC1503 | - | - |
| CN1501 | | |
| 1 | 0 | 0 |
| 2 | 4.5 | 4.5 |
| 3 | 4.5 | 4.5 |
| 4 | 4.8 | 4.8 |
| 5 | 0.3 | 0.3 |
| 6 | 0.3 | 0.3 |
| 7 | 9.1 | 9.1 |
| 8 | 0 | 0 |
| 9 | 2.1 | 2.1 |

### <S-SUB>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC501 | - | - |
| IC502 | | |
| 1 | 2.0 | 2.0 |
| 2 | 0.3 | 4.5 |
| 3 | 3.3 | 3.3 |
| 4 | 3.4 | 3.4 |
| 5 | 4.9 | 4.9 |
| 6 | 2.2 | 2.2 |
| 7 | 2.0 | 2.0 |
| 8 | 4.9 | 4.9 |
| 9 | 1.4 | 1.4 |
| 10 | 2.9 | 2.9 |
| 11 | 2.9 | 2.9 |
| 12 | 2.9 | 2.9 |
| 13 | 0 | 0 |
| 14 | 2.8 | 2.8 |
| 15 | 2.8 | 2.8 |
| 16 | 1.9 | 1.9 |
| 17 | 1.9 | 1.9 |
| 18 | 1.9 | 1.9 |
| CN511 | | |
| 1 | 0.3 | 4.5 |
| 2 | 4.2 | 4.2 |
| 3 | 4.6 | 4.6 |
| 4 | 2.4 | 2.4 |
| 5 | 4.9 | 4.9 |
| 6 | 4.9 | 4.9 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 2.3 | 2.3 |
| 10 | 2.1 | 2.1 |
| 11 | 3.3 | 3.3 |
| 12 | 2.9 | 2.9 |
| 13 | 2.8 | 2.8 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 2.4 | 2.1 |
| 17 | 1.3 | 2.3 |
| 18 | 4.8 | 4.8 |
| 19 | 0 | 0 |
| 20 | 0 | 0 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 0 | 0 |
| 25 | 2.3 | 2.3 |
| 26 | 0 | 0 |
| 27 | 2.5 | 2.5 |
| 28 | 0 | 0 |
| 29 | 3.4 | 2.4 |
| 30 | 2.8 | 2.8 |
| CN512 | | |
| 1 | 0 | 0 |
| 2 | 2.4 | 2.4 |
| 3 | 0 | 0 |
| 4 | 2.4 | 2.4 |
| 5 | 0 | 0 |
| 6 | 2.3 | 2.3 |
| 7 | 0 | 0 |
| 8 | 1.3 | 1.3 |
| 9 | 0 | 0 |
| 10 | 1.1 | 1.1 |
| 11 | 0 | 0 |
| 12 | 0.7 | 0.7 |
| 13 | 0 | 0 |
| 14 | 0.1 | 0.1 |

### <MDA>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC5501 | | |
| 1 | 0 | 0 |
| 2 | 1.0 | 1.0 |
| 3 | 5.0 | 5.0 |
| 4 | 1.0 | 1.0 |
| 5 | 0 | 0 |
| 6 | 4.5 | 4.5 |
| 7 | 1.0 | 1.0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 6.6 | 6.6 |
| 13 | 0 | 0 |
| 14 | 0.6 | 0.6 |
| 15 | 0 | 0 |
| 16 | 0 | 0 |
| 17 | 0.5 | 0.5 |
| 18 | 5.0 | 5.0 |
| 19 | 0.5 | 0.5 |
| 20 | 4.6 | 4.6 |
| 21 | 4.6 | 4.6 |
| 22 | 4.6 | 4.6 |
| 23 | 2.6 | 2.6 |
| 24 | 2.6 | 2.6 |
| 25 | 2.6 | 2.6 |
| 26 | 2.6 | 2.6 |
| 27 | 2.6 | 2.6 |
| 28 | 2.6 | 2.6 |
| 29 | 1.6 | 1.6 |
| 30 | 2.6 | 2.6 |
| 31 | - | - |
| 32 | 2.6 | 2.6 |
| 33 | 5.1 | 5.1 |
| 34 | 0.2 | 0.2 |
| 35 | 0.5 | 0.5 |
| 36 | 0.5 | 0.5 |
| 37 | 1.2 | 1.2 |
| 38 | 1.5 | 1.5 |
| 39 | 5.1 | 5.1 |
| 40 | 0 | 0 |
| 41 | 0 | 0 |
| 42 | 3.1 | 3.1 |
| 43 | 0 | 0 |
| 44 | 3.1 | 3.1 |
| 45 | 0 | 0 |
| 46 | 0 | 0 |
| 47 | 0 | 0 |
| 48 | 0 | 0 |
| 49 | 0 | 0 |
| 50 | 0 | 0 |
| 51 | 0 | 0 |
| 52 | 0 | 0 |
| 53 | 1.6 | 1.6 |
| 54 | 1.5 | 1.7 |
| 55 | 0.5 | 0.5 |
| 56 | 3.0 | 3.0 |
| 57 | 2.2 | 2.2 |
| 58 | 0 | 0 |
| 59 | 0.7 | 0.7 |
| 60 | 0 | 0 |
| 61 | 2.6 | 2.6 |
| 62 | 2.8 | 2.8 |
| 63 | 2.3 | 2.3 |
| 64 | 2.6 | 2.6 |
| 65 | 2.5 | 2.5 |
| 66 | 2.5 | 2.5 |
| 67 | 2.5 | 2.5 |
| 68 | 1.5 | 1.5 |
| 69 | 0 | 0 |
| 70 | 1.1 | 1.1 |
| 71 | 1.1 | 1.1 |
| 72 | 1.0 | 1.0 |
| 73 | 1.1 | 1.1 |
| 74 | 2.6 | 2.6 |
| 75 | 2.6 | 2.6 |
| 76 | 2.6 | 2.6 |
| 77 | 0.8 | 0.8 |
| 78 | 4.7 | 4.7 |
| 79 | 4.7 | 4.7 |
| 80 | 4.7 | 4.7 |
| IC5502 | - | - |
| CN5501 | | |
| 1 | 6.7 | 6.7 |
| 2 | 0 | 0 |
| 3 | 7.1 | 7.1 |
| 4 | 5.1 | 5.1 |
| 5 | 0 | 0 |
| CN5502 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| CN5503 | | |
| 1 | 2.6 | 2.6 |
| 2 | 2.5 | 2.5 |
| 3 | 1.0 | 1.0 |
| 4 | 1.0 | 1.0 |
| 5 | 1.0 | 1.0 |
| 6 | 1.0 | 1.0 |
| 7 | 1.0 | 1.0 |
| 8 | 1.0 | 1.0 |
| 9 | 1.0 | 1.0 |
| 10 | 2.5 | 2.5 |
| 11 | 0 | 0 |
| CN5504 | | |
| 1 | 0.6 | 0.6 |
| 2 | 0.6 | 0.6 |
| 3 | 0.6 | 0.6 |
| 4 | 0.6 | 0.6 |
| 5 | 0.6 | 0.6 |
| 6 | 0.6 | 0.6 |
| 7 | 5.1 | 5.1 |
| 8 | 2.3 | 2.3 |
| 9 | 2.5 | 2.5 |
| 10 | 2.5 | 2.5 |
| 11 | 2.5 | 2.5 |
| 12 | 2.8 | 2.8 |
| 13 | 2.5 | 2.5 |
| 14 | 2.5 | 2.5 |
| 15 | 2.5 | 2.5 |
| 16 | 2.5 | 2.5 |
| 17 | 0 | 0 |
| 18 | 2.5 | 2.5 |
| CN5505 | | |
| 1 | 3.1 | 3.1 |
| 2 | 3.1 | 3.1 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| CN5506 | | |
| 1 | 3.1 | 3.1 |
| 2 | 3.1 | 3.1 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 1.5 | 1.5 |
| 9 | 1.7 | 1.7 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 3.1 | 3.1 |
| 13 | 3.1 | 3.1 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 3.1 | 3.1 |
| 17 | 1.6 | 1.6 |
| 18 | 1.6 | 1.6 |
| 19 | 2.8 | 2.8 |
| 20 | 0 | 0 |
| CN5507 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |

### <PRE/REC>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC5001 | - | - |
| IC5002 | - | - |
| CN5001 | - | - |
| CN5002 | | |
| 1 | 0 | 0 |
| 2 | 3.1 | 0 |
| 3 | 3.1 | 0 |
| 4 | 0 | 3.1 |
| 5 | 1.5 | 1.5 |
| 6 | 0 | 3.1 |
| 7 | 0 | 0 |
| 8 | 0.7 | 0.7 |
| 9 | 1.5 | 1.5 |
| 10 | 1.1 | 1.1 |
| 11 | 2.5 | 1.9 |
| 12 | 2.5 | 1.3 |
| 13 | 1.2 | 1.2 |
| 14 | 2.5 | 1.3 |
| 15 | 2.5 | 1.9 |
| 16 | 0 | 0 |
| 17 | 0.4 | 0.4 |
| 18 | 0.5 | 0 |
| 19 | 1.4 | 0 |
| 20 | 1.2 | 1.2 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 3.1 | 3.1 |
| 24 | 5.1 | 5.1 |
| 25 | 3.1 | 3.1 |
| 26 | 2.5 | 2.5 |

### <ON SCREEN>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC851 | | |
| 1 | 0 | 0 |
| 2 | 2.5 | 2.5 |
| 3 | 4.8 | 4.8 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 2.4 | 2.4 |
| 7 | 2.5 | 2.5 |
| 8 | 4.9 | 4.9 |
| 9 | 0 | 3.2 |
| 10 | 4.3 | 4.3 |
| 11 | 4.4 | 1.6 |
| 12 | 4.9 | 4.9 |
| 13 | 2.9 | 2.9 |
| 14 | 0 | 0 |
| 15 | 2.6 | 2.6 |
| 16 | 1.2 | 1.2 |
| 17 | 0 | 0 |
| 18 | 2.8 | 2.8 |
| 19 | 0 | 0 |
| 20 | 5.0 | 5.0 |
| 21 | 5.0 | 5.0 |
| 22 | 3.5 | 3.5 |
| 23 | 4.9 | 4.9 |
| 24 | 5.0 | 5.0 |
| CN851 | | |
| 1 | 2.8 | 2.8 |
| 2 | 2.9 | 2.9 |
| 3 | 4.3 | 4.3 |
| 4 | 4.4 | 1.4 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 4.8 | 4.8 |
| 10 | 2.2 | 2.2 |
| 11 | 0 | 0 |
| 12 | 2.6 | 2.6 |
| 13 | 0 | 0 |
| 14 | 2.3 | 2.3 |
| 15 | 4.9 | 4.9 |
| 16 | 1.8 | 1.8 |
| 17 | 2.9 | 2.9 |
| 18 | 11.4 | 11.4 |
| 19 | 0 | 0 |
| 20 | 1.2 | 1.2 |

### <DISPLAY>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC7001 | | |
| 1 | 4.8 | 4.8 |
| 2 | 2.2 | 2.2 |
| 3 | 0 | 0 |
| 4 | 2.2 | 2.2 |
| 5 | 4.8 | 4.8 |
| 6 | 4.8 | 4.8 |
| 7 | 4.8 | 4.8 |
| 8 | 4.9 | 4.9 |
| 9 | 4.8 | 4.8 |
| 10 | 4.9 | 4.9 |
| 11 | 4.8 | 4.8 |
| 12 | 4.2 | 4.2 |
| 13 | 4.4 | 3.8 |
| 14 | 4.8 | 4.8 |
| 15 | 4.3 | 4.3 |
| 16 | -28.3 | -28.3 |
| 17 | -28.3 | -28.3 |
| 18 | 4.6 | 4.6 |
| 19 | -28.1 | 4.6 |
| 20 | 4.6 | -28.0 |
| 21 | -23.9 | -23.9 |
| 22 | - | - |
| 23 | - | - |
| 24 | - | - |
| 25 | - | - |
| 26 | - | - |
| 27 | - | - |
| 28 | - | - |
| 29 | - | - |
| 30 | - | - |
| 31 | - | - |
| 32 | - | - |
| 33 | - | - |
| 34 | - | - |
| 35 | - | - |
| 36 | - | - |
| 37 | - | - |
| 38 | - | - |
| 39 | - | - |
| 40 | - | - |
| 41 | - | - |
| 42 | - | - |
| 43 | - | - |
| 44 | 4.9 | 4.9 |
| IC7002 | | |
| 1 | 0 | 4.8 |
| 2 | 4.8 | 4.8 |
| 3 | 0 | 0 |
| CN7001 | | |
| 1 | 4.9 | 4.9 |
| 2 | 4.9 | 4.9 |
| 3 | 4.3 | 4.3 |
| 4 | 4.8 | 4.8 |
| 5 | 4.4 | 3.7 |
| 6 | 4.2 | 4.2 |
| 7 | 4.8 | 4.8 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | -19.3 | -19.3 |
| 11 | -15.8 | -15.8 |
| 12 | -28.4 | -28.4 |
| 13 | 3.8 | 3.8 |
| 14 | 3.5 | 3.5 |
| 15 | 3.8 | 3.8 |
| 16 | 3.5 | 3.5 |
| 17 | 4.8 | 4.8 |
| 18 | 0 | 0 |
| FW7003 | | |
| 1 | 3.6 | 3.6 |
| 2 | 4.8 | 4.8 |
| 3 | 4.8 | 4.8 |
| 4 | 0 | 0 |
| FW7005 | | |
| 1 | 0 | 0 |
| 2 | 4.8 | 4.8 |

### <JACK>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| CN7002 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| 11 | 5.0 | 5.0 |
| 12 | 5.0 | 5.0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 4.9 | 4.9 |
| 16 | 4.9 | 4.9 |
| FW7007 | | |
| 1 | 4.9 | 4.9 |
| 2 | 4.8 | 4.8 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 4.7 | 4.7 |
| 6 | 4.7 | 4.7 |

### <DV SYSCON>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC1001 | | |
| 1 | 0 | 0 |
| 2 | 3.1 | 3.1 |
| 3 | 0 | 0 |
| 4 | 3.0 | 3.0 |
| 5 | 1.6 | 1.6 |
| 6 | 3.1 | 3.1 |
| 7 | 3.1 | 3.1 |
| 8 | 0 | 0 |
| 9 | 2.7 | 2.7 |
| 10 | 1.2 | 1.2 |
| 11 | 1.5 | 1.5 |
| 12 | 0 | 0 |
| 13 | 1.5 | 1.5 |
| 14 | 2.7 | 2.7 |
| 15 | 1.2 | 1.2 |
| 16 | 3.1 | 3.1 |
| 17 | 1.4 | 1.4 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 20 | 1.1 | 1.1 |
| 21 | 1.1 | 1.1 |
| 22 | 1.2 | 1.2 |
| 23 | 0 | 0 |
| 24 | 0 | 0 |
| 25 | 3.1 | 3.1 |
| 26 | 1.6 | 1.6 |
| 27 | 0 | 0 |
| 28 | 0 | 0 |
| 29 | 3.1 | 3.1 |
| 30 | - | - |
| 31 | - | - |
| 32 | 0 | 0 |
| 33 | 0 | 0 |
| 34 | 0.2 | 0.2 |
| 35 | 3.1 | 3.1 |
| 36 | 0 | 0 |
| 37 | 0 | 0 |
| 38 | 2.5 | 2.5 |
| 39 | 0 | 0 |
| 40 | 0 | 0 |
| 41 | 0 | 0 |
| 42 | 3.1 | 3.1 |
| 43 | 0 | 0 |
| 44 | 3.1 | 3.1 |
| 45 | 0 | 0 |
| 46 | 0 | 0 |
| 47 | 0 | 0 |
| 48 | 3.1 | 3.1 |
| 49 | 3.1 | 3.1 |
| 50 | 3.1 | 3.1 |
| 51 | 1.4 | 1.4 |
| 52 | 0 | 0 |
| 53 | 0 | 0 |
| 54 | 3.1 | 3.1 |
| 55 | 0 | 0 |
| 56 | 2.6 | 2.6 |
| 57 | 3.1 | 3.1 |
| 58 | 3.0 | 3.0 |
| 59 | 0 | 0 |
| 60 | 3.1 | 3.1 |
| 61 | 3.1 | 3.1 |
| 62 | 2.7 | 2.7 |
| 63 | 2.7 | 2.7 |
| 64 | 0 | 0 |
| 65 | 0 | 0 |
| 66 | 3.1 | 3.1 |
| 67 | 3.1 | 3.1 |
| 68 | 3.1 | 3.1 |
| 69 | 0 | 0 |
| 70 | 0 | 0 |
| 71 | 0 | 0 |
| 72 | 3.1 | 3.1 |
| 73 | 0 | 0 |
| 74 | 0 | 0 |
| 75 | 0 | 0 |
| 76 | 0 | 0 |
| 77 | 0 | 0 |
| 78 | 0 | 0 |
| 79 | 0 | 0 |
| 80 | 0 | 0 |
| 81 | 3.1 | 3.1 |
| 82 | 0 | 0 |
| 83 | 0 | 0 |
| 84 | 0 | 0 |
| 85 | 0 | 0 |
| 86 | 3.1 | 3.1 |
| 87 | 3.1 | 3.1 |
| 88 | 0 | 0 |
| 89 | 3.1 | 3.1 |
| 90 | 0 | 0 |
| 91 | 0 | 0 |
| 92 | 0 | 0 |
| 93 | 0 | 0 |
| 94 | 3.1 | 3.1 |
| 95 | 3.1 | 3.1 |
| 96 | 3.1 | 3.1 |
| 97 | 0 | 0 |
| 98 | 3.1 | 3.1 |
| 99 | 0 | 0 |
| 100 | 3.1 | 3.1 |
| 101 | 3.1 | 3.1 |
| 102 | 3.1 | 3.1 |
| 103 | 3.1 | 3.1 |
| 104 | 3.1 | 3.1 |
| 105 | 0 | 0 |
| 106 | 0 | 0 |
| 107 | 0 | 0 |
| 108 | 3.1 | 3.1 |
| 109 | 3.1 | 3.1 |
| 110 | 3.1 | 3.1 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| 111 | 0 | 0 |
| 112 | 3.1 | 3.1 |
| 113 | 3.1 | 3.1 |
| 114 | 3.1 | 3.1 |
| 115 | 3.1 | 3.1 |
| 116 | 0 | 0 |
| 117 | 0 | 0 |
| 118 | 0 | 0 |
| 119 | 3.0 | 3.0 |
| 120 | 0.2 | 0.2 |
| 121 | 3.1 | 3.1 |
| 122 | 0 | 0 |
| 123 | 3.1 | 3.1 |
| 124 | 3.1 | 3.1 |
| 125 | 0.2 | 0.2 |
| 126 | 3.1 | 3.1 |
| 127 | 0 | 0 |
| 128 | 0.2 | 0.2 |
| IC1002 | | |
| 1 | 0 | 0 |
| 2 | 0.5 | 0.5 |
| 3 | 3.1 | 3.1 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 2.6 | 2.6 |
| 7 | 3.1 | 3.1 |
| 8 | 3.1 | 3.1 |
| IC1005 | | |
| 1 | 3.1 | 3.1 |
| 2 | 3.1 | 3.1 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| IC1006 | | |
| 1 | 0 | 0 |
| 2 | 3.1 | 3.1 |
| 3 | 2.6 | 2.6 |
| 4 | 0 | 0 |
| 5 | 3.1 | 3.1 |
| 6 | 0.5 | 0.5 |
| 7 | 0.4 | 0.4 |
| 8 | 3.1 | 3.1 |
| IC1007 | | |
| 1 | 3.1 | 3.1 |
| 2 | 2.6 | 2.6 |
| 3 | 3.1 | 3.1 |
| 4 | 0 | 0 |
| 5 | 3.1 | 3.1 |
| 6 | 3.1 | 3.1 |
| 7 | 3.1 | 3.1 |
| 8 | 3.1 | 3.1 |
| IC1008 | | |
| 1 | 3.1 | 3.1 |
| 2 | 3.1 | 3.1 |
| 3 | 3.1 | 3.1 |
| 4 | 0 | 0 |
| 5 | 3.1 | 3.1 |
| 6 | 3.1 | 3.1 |
| 7 | 3.1 | 3.1 |
| 8 | 3.1 | 3.1 |
| IC1009 | | |
| 1 | 3.1 | 3.1 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 1.8 | 1.8 |
| 5 | 3.1 | 3.1 |
| IC1010 | | |
| 1 | 3.1 | 3.1 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 1.8 | 1.8 |
| 5 | 3.1 | 3.1 |
| CN1001 | | |
| 1 | -7.2 | -7.2 |
| 2 | 5.1 | 5.1 |
| 3 | 0 | 0 |
| 4 | 3.2 | 3.2 |
| 5 | 3.2 | 3.2 |
| 6 | 0 | 0 |
| 7 | 3.2 | 3.2 |
| 8 | 3.2 | 3.2 |
| 9 | 0 | 0 |
| 10 | 0 | 0 |
| CN1002 | | |
| 1 | 0 | 0 |
| 2 | 3.0 | 3.0 |
| 3 | 3.0 | 3.0 |
| 4 | 0 | 0 |
| 5 | 2.8 | 2.8 |
| 6 | 3.8 | 3.8 |
| CN1101 | | |
| 1 | 0 | 0 |
| 2 | 5.1 | 5.1 |
| 3 | 3.1 | 3.1 |
| 4 | 0 | 0 |
| 5 | 3.1 | 3.1 |
| 6 | 3.1 | 3.1 |
| 7 | 3.1 | 3.1 |
| 8 | 0 | 0 |
| 9 | 1.3 | 1.3 |
| 10 | 0 | 0 |
| 11 | 1.5 | 1.5 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 0 | 0 |
| 17 | 3.0 | 3.0 |
| 18 | 3.1 | 3.1 |
| 19 | 3.4 | 3.4 |
| 20 | 2.7 | 2.7 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 2.5 | 1.9 |
| 24 | 1.6 | 1.6 |
| 25 | 0 | 0 |
| 26 | 0 | 0 |

<DV MSD>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC1501 | | |
| 1 | 0 | 0 |
| 2 | 3.1 | 3.1 |
| 3 | 3.1 | 3.1 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0.2 | 0.2 |
| 7 | 3.1 | 3.1 |
| 8 | 0 | 0 |
| 9 | 0.2 | 0.2 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 3.1 | 3.1 |
| 15 | 0 | 0 |
| 16 | 3.1 | 3.1 |
| 17 | 2.9 | 2.9 |
| 18 | 0 | 0 |
| 19 | 0 | 0 |
| 20 | 0 | 0 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 0 | 0 |
| 24 | 0 | 0 |
| 25 | 0 | 0 |
| 26 | 0 | 0 |
| 27 | 0 | 0 |
| 28 | 0 | 0 |
| 29 | 3.1 | 3.1 |
| 30 | 3.1 | 3.1 |
| 31 | 0.2 | 0.2 |
| 32 | 0.2 | 0.2 |
| 33 | 0.4 | 0.4 |
| 34 | 0.6 | 0.6 |
| 35 | 0.6 | 0.6 |
| 36 | 0.6 | 0.6 |
| 37 | 0.6 | 0.6 |
| 38 | 0.6 | 0.6 |
| 39 | 0 | 0 |
| 40 | 0.2 | 0.2 |
| 41 | 0.2 | 0.2 |
| 42 | 0.3 | 0.3 |
| 43 | 0.2 | 0.2 |
| 44 | 0.2 | 0.2 |
| 45 | 0.3 | 0.3 |
| 46 | 0.2 | 0.2 |
| 47 | 0.5 | 0.5 |
| 48 | 3.1 | 3.1 |
| 49 | 0.4 | 0.4 |
| 50 | 2.9 | 2.9 |
| 51 | 0 | 0 |
| 52 | 3.0 | 3.0 |
| 53 | 3.1 | 3.1 |
| 54 | 0 | 0 |
| 55 | 0 | 0 |
| 56 | 3.1 | 3.1 |
| 57 | - | - |
| 58 | 0 | 0 |
| 59 | 0 | 0 |
| 60 | 3.1 | 3.1 |
| 61 | 3.1 | 3.1 |
| 62 | 1.5 | 1.5 |
| 63 | 1.1 | 1.1 |
| 64 | 3.1 | 3.1 |
| 65 | 0 | 0 |
| 66 | 3.1 | 3.1 |
| 67 | 2.7 | 2.7 |
| 68 | 0 | 0 |
| 69 | 0 | 0 |
| 70 | 3.1 | 3.1 |
| 71 | 0 | 0 |
| 72 | 3.1 | 3.1 |
| 73 | 3.1 | 3.1 |
| 74 | 0 | 0 |
| 75 | 0 | 0 |
| 76 | 0 | 0 |
| 77 | 0 | 3.1 |
| 78 | 3.1 | 0 |
| 79 | 0 | 3.1 |
| 80 | 3.1 | 3.1 |
| 81 | 0 | 0 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| 82 | 3.1 | 3.1 |
| 83 | 3.1 | 3.1 |
| 84 | 3.1 | 3.1 |
| 85 | 0 | 0 |
| 86 | 0 | 0 |
| 87 | 0 | 0 |
| 88 | 0 | 0 |
| 89 | 0 | 0 |
| 90 | 0 | 0 |
| 91 | 0 | 0 |
| 92 | 0 | 0 |
| 93 | 0 | 0 |
| 94 | 0 | 0 |
| 95 | 0 | 0 |
| 96 | 0 | 0 |
| 97 | 3.1 | 3.1 |
| 98 | 3.1 | 3.1 |
| 99 | 3.1 | 3.1 |
| 100 | 0 | 0 |
| 101 | 3.1 | 3.1 |
| 102 | 3.1 | 3.1 |
| 103 | 3.1 | 3.1 |
| 104 | 3.1 | 3.1 |
| 105 | 3.1 | 3.1 |
| 106 | 3.1 | 3.1 |
| 107 | 0 | 0 |
| 108 | 0 | 0 |
| 109 | 0 | 0 |
| 110 | 0 | 0 |
| 111 | 0 | 0 |
| 112 | 0 | 0 |
| 113 | 2.7 | 2.7 |
| 114 | 1.5 | 1.5 |
| 115 | 1.6 | 1.6 |
| 116 | 3.1 | 3.1 |
| 117 | 0 | 0 |
| 118 | 0 | 0 |
| 119 | 0 | 0 |
| 120 | 0.2 | 0.2 |
| 121 | 0.3 | 0.3 |
| 122 | 3.1 | 3.1 |
| 123 | 3.1 | 3.1 |
| 124 | 3.1 | 3.1 |
| 125 | 0 | 0 |
| 126 | 0 | 0 |
| 127 | 3.1 | 3.1 |
| 128 | 0 | 0 |
| 129 | 0 | 0 |
| 130 | 3.1 | 3.1 |
| 131 | 0 | 0 |
| 132 | 0 | 0 |
| 133 | 0 | 0 |
| 134 | 0 | 0 |
| 135 | 3.1 | 3.1 |
| 136 | 1.6 | 1.6 |
| 137 | 0 | 0 |
| 138 | 0 | 0 |
| 139 | 1.9 | 1.9 |
| 140 | 1.5 | 1.5 |
| 141 | 0 | 0 |
| 142 | 1.5 | 1.5 |
| 143 | 0 | 0 |
| 144 | 0 | 0 |
| 145 | 0 | 0 |
| 146 | 1.6 | 1.6 |
| 147 | 1.7 | 1.7 |
| 148 | 0.3 | 0.3 |
| 149 | 1.5 | 1.5 |
| 150 | 1.6 | 1.6 |
| 151 | 3.1 | 3.1 |
| 152 | - | - |
| 153 | - | - |
| 154 | 1.6 | 1.6 |
| 155 | 1.6 | 1.6 |
| 156 | 1.6 | 1.6 |
| 157 | 0 | 0 |
| 158 | 1.5 | 1.5 |
| 159 | 0.2 | 0.2 |
| 160 | 0 | 0 |
| 161 | 0.2 | 0.2 |
| 162 | 0 | 0 |
| 163 | 0 | 0 |
| 164 | 0 | 0 |
| 165 | 0 | 0 |
| 166 | 3.1 | 3.1 |
| 167 | 0 | 0 |
| 168 | 0 | 0 |
| 169 | 0.2 | 0.2 |
| 170 | 3.1 | 0 |
| 171 | 0 | 0 |
| 172 | 0 | 0 |
| 173 | 3.1 | 3.1 |
| 174 | 3.1 | 3.1 |
| 175 | 3.0 | 0.3 |
| 176 | 0.2 | 0.2 |
| 177 | 0 | 0 |
| 178 | 3.1 | 3.1 |
| 179 | 3.1 | 3.1 |
| 180 | 3.1 | 3.1 |
| 181 | 3.1 | 3.1 |
| 182 | 0 | 0 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| 183 | 2.7 | 2.7 |
| 184 | 5.1 | 5.1 |
| 185 | 0 | 0 |
| 186 | 0 | 0 |
| 187 | 0.2 | 0.2 |
| 188 | 3.1 | 0 |
| 189 | 0.2 | 0.2 |
| 190 | 3.1 | 3.1 |
| 191 | 3.1 | 3.1 |
| 192 | 3.1 | 3.1 |
| 193 | 0 | 0 |
| 194 | 3.1 | 3.1 |
| 195 | 2.3 | 2.3 |
| 196 | 3.1 | 3.1 |
| 197 | 1.4 | 1.4 |
| 198 | 0 | 0 |
| 199 | 3.1 | 3.1 |
| 200 | 0 | 0 |
| 201 | 2.8 | 2.8 |
| 202 | 2.8 | 2.8 |
| 203 | 0 | 0 |
| 204 | 3.1 | 3.1 |
| 205 | 3.1 | 3.1 |
| 206 | 3.1 | 3.1 |
| 207 | 3.1 | 3.1 |
| 208 | 0 | 0.3 |
| IC1502 | | |
| 1 | - | - |
| 2 | 3.1 | 3.1 |
| 3 | - | - |
| 4 | 0 | 0 |
| 5 | - | - |
| 6 | 0.1 | 0.1 |
| 7 | - | - |
| 8 | 3.1 | 3.1 |
| IC1601 | | |
| 1 | 3.1 | 3.1 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 3.1 | 3.1 |
| 8 | 3.1 | 3.1 |
| CN1501 | | |
| 1 | 3.1 | 3.1 |
| 2 | 3.1 | 3.1 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 1.5 | 1.5 |
| 9 | 1.7 | 1.7 |
| 10 | 0 | 0 |
| 11 | 0 | 0 |
| 12 | 3.1 | 3.1 |
| 13 | 3.1 | 3.1 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |
| 16 | 3.1 | 3.1 |
| 17 | 1.6 | 1.6 |
| 18 | 1.6 | 1.6 |
| 19 | 2.8 | 2.8 |
| 20 | 0 | 0 |
| CN1502 | | |
| 1 | 0 | 0 |
| 2 | 3.1 | 3.1 |
| 3 | 0 | 0 |
| 4 | 1.2 | 1.2 |
| 5 | - | - |
| 6 | 3.1 | 3.1 |
| 7 | 1.2 | 1.2 |
| 8 | - | - |
| 9 | 3.1 | 3.1 |
| 10 | 3.1 | 3.1 |
| 11 | 0 | 0 |
| 12 | 0 | 0 |
| 13 | 3.1 | 3.1 |
| 14 | 0 | 0 |
| 15 | 0 | 0 |

<DV MAIN>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC2001 | - | - |
| IC2002 | | |
| 1 | 0 | 0.4 |
| 2 | 0 | 0.4 |
| 3 | 0 | 0 |
| 4 | 1.4 | 1.4 |
| 5 | 0.1 | 0 |
| 6 | 3.1 | 0 |
| 7 | 0 | 0 |
| 8 | 2.9 | 2.9 |
| IC2003 | | |
| 1 | 3.1 | 3.1 |
| 2 | 0 | 0 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| 3 | 1.2 | 1.2 |
| 4 | 2.5 | 2.5 |
| 5 | 3.1 | 3.1 |
| IC2004 | | |
| 1 | 5.1 | 5.1 |
| 2 | 0 | 0 |
| 3 | 1.2 | 1.2 |
| 4 | 2.9 | 2.9 |
| 5 | 5.1 | 5.1 |
| IC2007 | | |
| 1 | 3.1 | 3.1 |
| 2 | 0.9 | 0.9 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 1.4 | 1.4 |
| 7 | 2.4 | 2.4 |
| 8 | 3.1 | 3.1 |
| CN2001 | | |
| 1 | 0 | 0 |
| 2 | 3.1 | 0 |
| 3 | 3.1 | 0 |
| 4 | 0 | 3.1 |
| 5 | 1.5 | 1.5 |
| 6 | 0 | 3.1 |
| 7 | 0 | 0 |
| 8 | 0.7 | 0.7 |
| 9 | 1.5 | 1.5 |
| 10 | 1.1 | 1.1 |
| 11 | 2.5 | 1.9 |
| 12 | 2.5 | 1.3 |
| 13 | 1.2 | 1.2 |
| 14 | 2.5 | 1.3 |
| 15 | 2.5 | 1.9 |
| 16 | 0 | 0 |
| 17 | 0.4 | 0.4 |
| 18 | 0.5 | 0 |
| 19 | 1.4 | 0 |
| 20 | 1.2 | 1.2 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 3.1 | 3.1 |
| 24 | 5.1 | 5.1 |
| 25 | 3.1 | 3.1 |
| 26 | 2.5 | 2.5 |

<DV I/O>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC3001 | | |
| 1 | 0 | 0 |
| 2 | 3.0 | 3.0 |
| 3 | 1.1 | 1.1 |
| 4 | 0.5 | 0.5 |
| 5 | 0.8 | 0.8 |
| 6 | 1.6 | 1.6 |
| 7 | 0.5 | 0.5 |
| 8 | 1.0 | 1.0 |
| 9 | 0 | 0 |
| 10 | 2.9 | 2.9 |
| 11 | 1.7 | 1.1 |
| 12 | 1.1 | 0.5 |
| 13 | 0 | 0 |
| 14 | 3.0 | 3.0 |
| 15 | 1.4 | 1.4 |
| 16 | 0.4 | 0.4 |
| 17 | 2.4 | 2.4 |
| 18 | 1.3 | 1.3 |
| 19 | 0 | 0 |
| 20 | 0 | 0 |
| 21 | 0 | 0 |
| 22 | 0 | 0 |
| 23 | 1.8 | 1.8 |
| 24 | 3.1 | 3.1 |
| 25 | 1.6 | 1.6 |
| 26 | 1.0 | 0 |
| 27 | 1.0 | 0 |
| 28 | 0.9 | 0 |
| 29 | 1.5 | 1.3 |
| 30 | 0 | 0 |
| 31 | 3.1 | 3.1 |
| 32 | 1.7 | 1.3 |
| 33 | 1.0 | 0 |
| 34 | 0.7 | 0 |
| 35 | 0.5 | 0 |
| 36 | 3.1 | 3.1 |
| 37 | 1.5 | 1.5 |
| 38 | 1.0 | 1.0 |
| 39 | 1.0 | 1.0 |
| 40 | 0.9 | 0.9 |
| 41 | 1.5 | 1.5 |
| 42 | 1.7 | 1.7 |
| 43 | 1.1 | 1.1 |
| 44 | 0.8 | 0.8 |
| 45 | 0.6 | 0.6 |
| 46 | 0 | 0 |
| 47 | 0 | 0 |
| 48 | 0 | 0 |
| 49 | 3.1 | 3.1 |
| 50 | 3.1 | 3.1 |
| 51 | 2.7 | 2.7 |

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| 52 | 0 | 0 |
| 53 | 1.8 | 1.8 |
| 54 | 1.6 | 1.6 |
| 55 | 3.1 | 3.1 |
| 56 | 3.1 | 3.1 |
| 57 | 0 | 0 |
| 58 | 0 | 0 |
| 59 | 2.9 | 2.9 |
| 60 | 3.1 | 3.1 |
| 61 | 1.5 | 1.5 |
| 62 | 0 | 0 |
| 63 | 3.1 | 3.1 |
| 64 | 0 | 0 |
| 65 | 0 | 0 |
| 66 | 0 | 0 |
| 67 | 0 | 0 |
| 68 | 0 | 0 |
| 69 | 0 | 0 |
| 70 | 0 | 0 |
| 71 | 0 | 0 |
| 72 | 0 | 0 |
| 73 | 3.0 | 3.0 |
| 74 | 1.1 | 1.1 |
| 75 | 3.0 | 3.0 |
| 76 | 0.8 | 0.8 |
| 77 | 1.7 | 1.7 |
| 78 | 3.0 | 3.0 |
| 79 | 1.1 | 1.1 |
| 80 | 0.9 | 0.9 |
| IC3101 | | |
| 1 | 0 | 0 |
| 2 | - | - |
| 3 | 0 | 0 |
| 4 | 1.4 | 1.4 |
| 5 | 3.1 | 3.1 |
| IC3102 | | |
| 1 | 0 | 0 |
| 2 | 1.4 | 1.4 |
| 3 | 0 | 0 |
| 4 | 1.6 | 1.6 |
| 5 | 3.1 | 3.1 |
| IC3151 | | |
| 1 | 0 | 0 |
| 2 | 2.3 | 2.3 |
| 3 | 1.4 | 1.4 |
| 4 | 0.7 | 0.7 |
| 5 | 1.5 | 1.5 |
| 6 | 1.7 | 1.7 |
| 7 | 2.0 | 2.0 |
| 8 | 3.0 | 2.1 |
| 9 | 0 | 0 |
| 10 | 3.0 | 3.0 |
| 11 | 3.0 | 3.0 |
| 12 | 0 | 0 |
| 13 | 0 | 0 |
| 14 | 1.6 | 1.6 |
| 15 | 0 | 0 |
| 16 | 3.1 | 3.1 |
| 17 | 3.1 | 3.1 |
| 18 | 1.2 | 1.2 |
| 19 | 1.2 | 1.2 |
| 20 | 0 | 0 |

<DV V OUT>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC3501 | | |
| 1 | 1.7 | 1.7 |
| 2 | 1.8 | 1.8 |
| 3 | 1.3 | 1.3 |
| 4 | 1.1 | 1.1 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |
| 9 | 2.6 | 2.6 |
| 10 | 2.4 | 2.4 |
| 11 | 1.6 | 1.6 |
| 12 | 1.9 | 1.9 |
| 13 | 0 | 0 |
| 14 | 2.0 | 2.0 |
| 15 | 5.1 | 5.1 |
| 16 | 3.0 | 3.0 |
| 17 | 0 | 0 |
| 18 | 2.0 | 2.0 |
| 19 | 1.8 | 1.8 |
| 20 | 1.8 | 1.8 |
| IC3502 | | |
| 1 | 5.1 | 5.1 |
| 2 | 0 | 0 |
| 3 | 1.2 | 1.2 |
| 4 | 3.0 | 3.0 |
| 5 | 5.1 | 5.1 |
| CN3501 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 1.7 | 1.7 |
| 5 | 0 | 0 |
| 6 | 4.1 | 4.1 |

<AUDIO AD/DA>

| MODE PIN NO. | REC | PLAY |
|---|---|---|
| IC3701 | | |
| 1 | 3.1 | 3.1 |
| 2 | 3.1 | 3.1 |
| 3 | 1.6 | 1.6 |
| 4 | 2.9 | 2.9 |
| 5 | 0.6 | 0.6 |
| 6 | 1.6 | 1.6 |
| 7 | 3.1 | 3.1 |
| 8 | 3.1 | 3.1 |
| 9 | 1.5 | 1.5 |
| 10 | 1.5 | 1.5 |
| 11 | 1.5 | 1.5 |
| 12 | 1.5 | 1.5 |
| 13 | 0 | 0 |
| 14 | 3.1 | 3.1 |
| 15 | 1.4 | 1.4 |
| 16 | 3.1 | 3.1 |
| 17 | 0 | 0 |
| 18 | 3.1 | 3.1 |
| 19 | 1.6 | 1.6 |
| 20 | 1.6 | 1.6 |
| 21 | 1.6 | 1.6 |
| 22 | 0 | 0 |
| 23 | 3.1 | 3.1 |
| 24 | 3.1 | 3.1 |
| IC3702 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | -6.0 | -6.0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 5.1 | 5.1 |
| IC3703 | | |
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | -6.0 | -6.0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 5.1 | 5.1 |
| CN3701 | | |
| 1 | 0 | 0 |
| 2 | 4.2 | 4.2 |
| 3 | 0 | 0 |
| 4 | 4.2 | 4.2 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 0 | 0 |
| 8 | 0 | 0 |

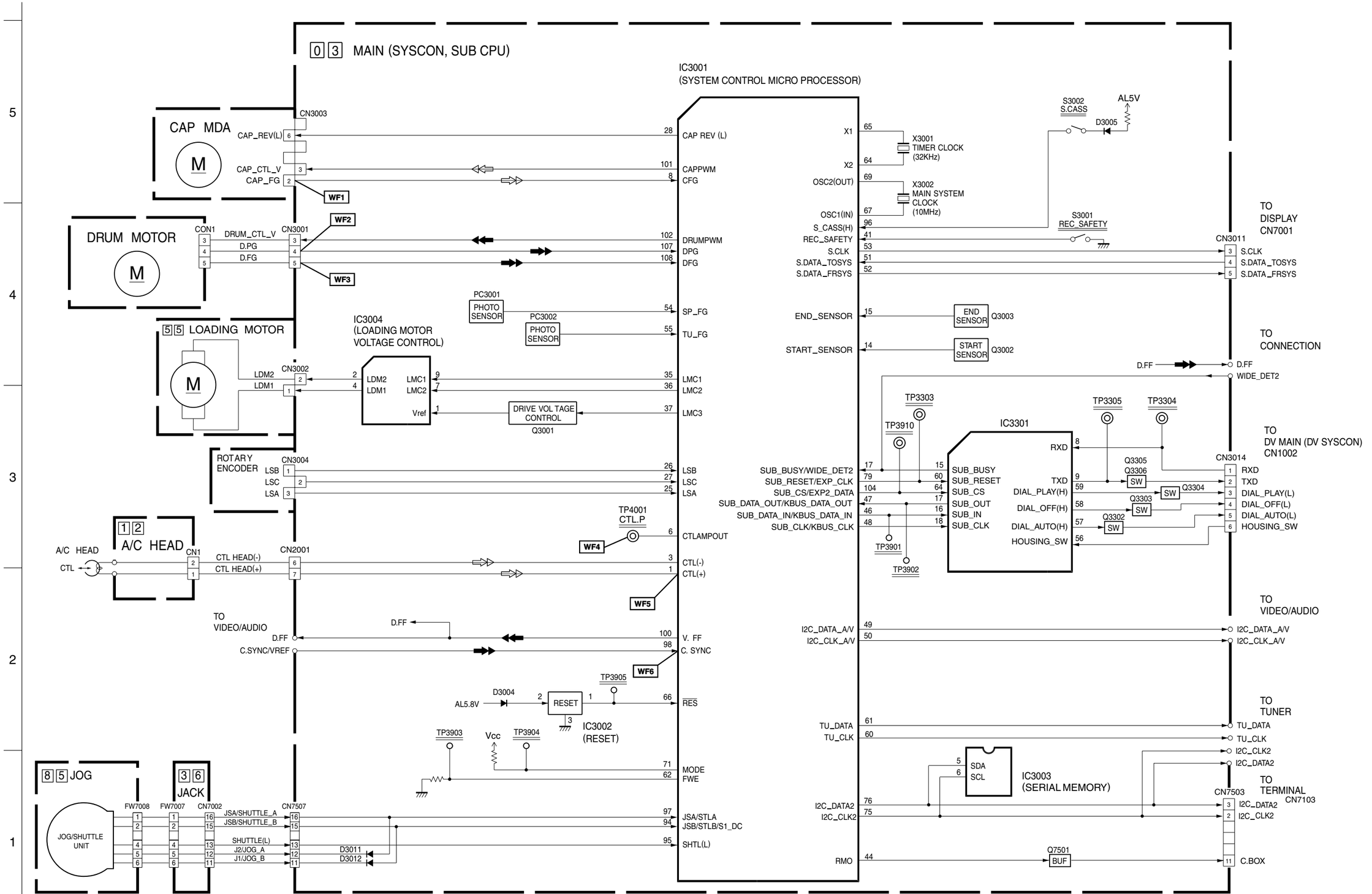
## 4.36 CPU PIN FUNCTION

### <SYSCON IC3001>

| PIN NO. | LABEL | IN/OUT | FUNCTION |
|---|---|---|---|
| 1 | CTL(+) | IN/OUT | CTL(+) SIGNAL |
| 2 | SVSS | - | GND |
| 3 | CTL(-) | IN/OUT | CTL(-) SIGNAL |
| 4 | CTLBIAS | - | CTL BIAS VOLTAGE |
| 5 | CTLFB | IN | CTL PULSE FEEDBACK |
| 6 | CTLAMPOUT | OUT | CTL PULSE OUTPUT |
| 7 | CTLSMTIN | IN | CTL PULSE INPUT |
| 8 | CFG | IN | CAPSTAN FG PULSE INPUT |
| 9 | SVCC | - | SYSTEM POWER |
| 10 | AVCC | - | SYSTEM POWER FOR ANALOG CIRCUIT |
| 11 | NORM/MESEC/S | IN | SVHS MODE:H |
| 12 | SECAM_DET(H)/KILLER_DET/BIT_IN(H) | IN | NC/COLOR KILLER DETECT/NC |
| 13 | PAUSE | IN | PAUSE CONTROL |
| 14 | START_SENSOR | IN | START SENSOR |
| 15 | END_SENSOR | IN | END SENSOR |
| 16 | TU_SYNC | - | NC |
| 17 | SUB_BUSY/WIDE_DET2 | IN | SERIAL TRANSMISSION SIGNAL FOR SUB CPU/NC |
| 18 | RF_AGC/LED | IN | CHANGES IN ATS+IC OUTPUT AS CAUSED BY CHANGES IN RECEIVER SENSITIVITY WHEN THE SAME CHANNEL IS RECEIVED MORE THAN ONCE ARE INPUT./NC |
| 19 | SCR_ID(H)/WIDE_DET | IN | SCRAMBLECONTROL INPUT (SCRAMBLE:H)/NC |
| 20 | BS_ANT/AFC | IN | NC/TUNING CLOCK |
| 21 | VIDEO_ENV | IN | AUTO TRACKING DETECT/INPUT THE AVERAGE OF PLAYBACK VIDEO SIGNAL |
| 22 | A.ENV/ND(L) | IN | AUDIO PB FM ENV.INPUT/NON HiFi MODE:L |
| 23 | AVSS | - | GND FOR ANALOG CIRCUIT |
| 24 | CTL_GAIN | OUT | CONTROL AMP OUT FREQUENCY RESPONSE SWITCHING |
| 25 | LSA | IN | MECHANISM MODE DETECT(A) |
| 26 | LSB | IN | MECHANISM MODE DETECT(B) |
| 27 | LSC | IN | MECHANISM MODE DETECT(C) |
| 28 | CAP_REV(L) | OUT | CAPSTAN MOTOR REVERSE CONTROL (FWD:H/REV:L) |
| 29 | RC | IN | REMOTE CONTROL DATA INPUT |
| 30 | LOCK(L) | IN | TUNING PLL LOCK DETECT:L |
| 31 | P50_IN | IN | CONTROL SIGNAL FOR TV LINK |
| 32 | ET_PB(H)/AGC_CTL | IN | NC |
| 33 | FRONT(H)/EXP1_DATA | OUT | FRONT INPUT:H/NC |
| 34 | P50_OUT/M_PULSE | OUT | CONTROL SIGNAL FOR TV LINK/NC |
| 35 | LMC1 | OUT | LOADING MOTOR DRIVE(1) |
| 36 | LMC2 | OUT | LOADING MOTOR DRIVE(2) |
| 37 | LMC3 | OUT | LOADING MOTOR DRIVE(3) |
| 38 | SB_G(PWM) | OUT | VOLTAGE CONTROL SIGNAL FOR VIDEO FREQUENCY RESPONSE |
| 39 | STB/TEST | OUT | STROBE SIGNAL (FOR FDP DRIVER) |
| 40 | POWER_DET | IN | DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY |
| 41 | REC_SAFETY | IN | REC SAFETY SWITCH DETECT (SW ON:L) |
| 42 | PROTECT | IN | DETECTION SIGNAL FOR SW POWER SUPPLY |
| 43 | VSS | - | GND |
| 44 | RMO/ANT_CTL(H) | OUT | REMOTE CONTROL OUTPUT FOR SATELLITE RECEIVER/NC |
| 45 | VCC | - | SYSTEM POWER |
| 46 | SUB_DATA_IN/KBUS_DATA_IN | IN/OUT | SERIAL DATA TRANSFER INPUT FOR SUB CPU/NC |
| 47 | SUB_DATA_OUT/KBUS_DATA_OUT | IN/OUT | SERIAL DATA TRANSFER OUTPUT FOR SUB CPU/NC |
| 48 | SUB_CLK/KBUS_CLK | OUT | SERIAL DATA TRANSFER CLOCK FOR SUB CPU/NC |
| 49 | I2C_DATA_A/V | IN/OUT | SERIAL DATA TRANSFER OUTPUT FOR THE VIDEO/AUDIO IC |
| 50 | I2C_CLK_A/V | OUT | SERIAL DATA TRANSFER CLOCK FOR THE VIDEO/AUDIO IC |
| 51 | S.DATA_TOSYS | IN | SERIAL DATA TRANSFER OUTPUT FROM THE ON-SCREEN IC TO THE FDP DRIVER |
| 52 | S.DATA_FRSYS | OUT | SERIAL DATA TRANSFER OUTPUT FROM THE FDP DRIVER TO THE ON-SCREEN IC |
| 53 | S.CLK | OUT | SERIAL DATA TRANSMISSION CLOCK FROM THE FDP DRIVER TO THE ON-SCREEN IC |
| 54 | SP_FG | IN | DETECTION SIGNAL FOR SUPPLY REEL ROTATION/TAPE REMAIN |
| 55 | TU_FG | IN | DETECTION SIGNAL FOR TAKE-UP REEL ROTATION/TAPE REMAIN |
| 56 | JUST/EDS(H)/SECAM | IN | NC |

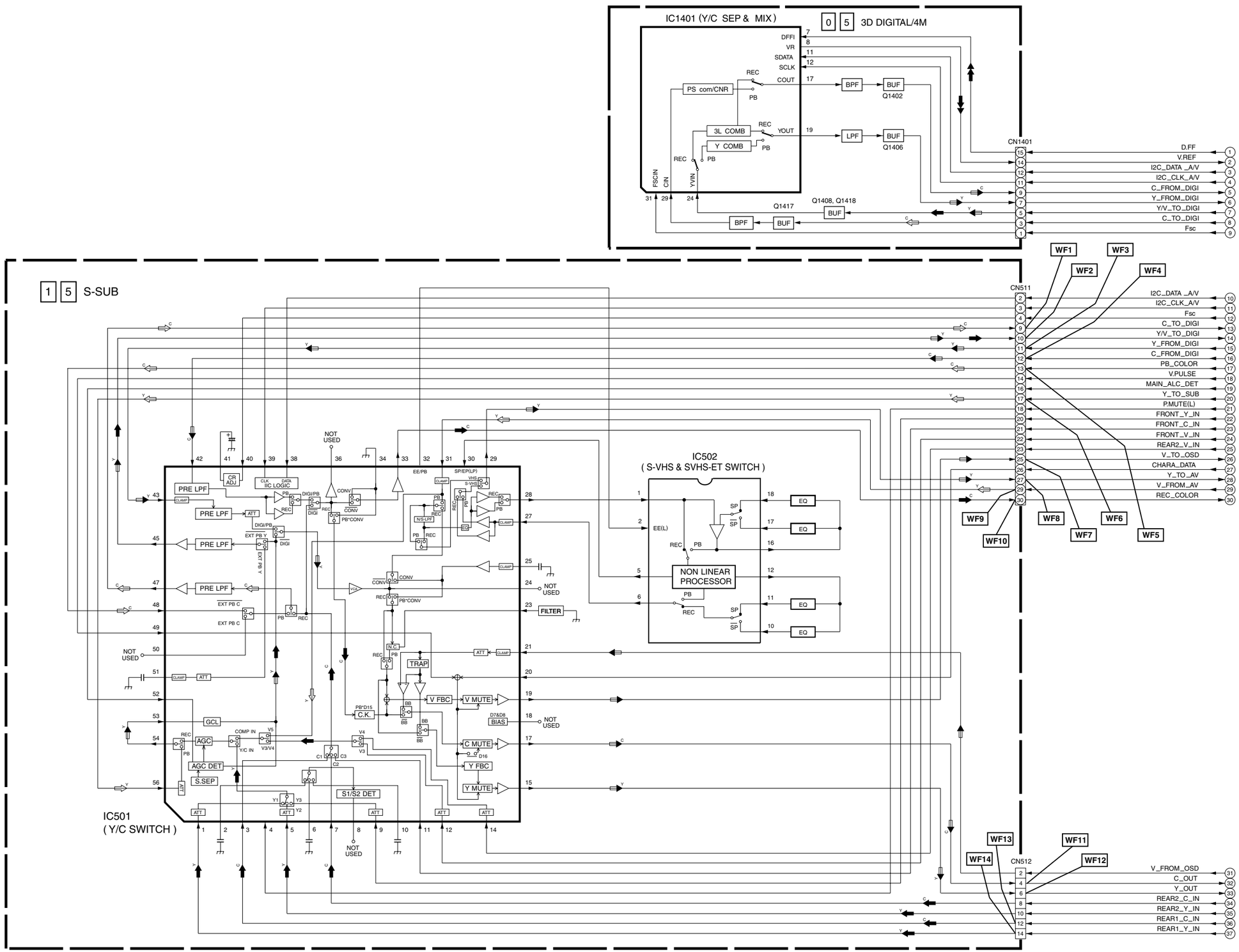
| PIN NO. | LABEL | IN/OUT | FUNCTION |
|---|---|---|---|
| 57 | TU_CE | OUT | CHIP ENABLE OF THE TUNER UNIT |
| 58 | N.REC_ST(H) | OUT | NORMAL AUDIO SOUND RECORDING START |
| 59 | SP_CONV/BS/KBUS_REQ | IN | AUDIO INPUT SWITCHING FOR DV |
| 60 | TU_CLK | OUT | CLOCK FOR DATA TRANSFER TO THE TUNER UNIT |
| 61 | TU_DATA | OUT | TUNING DATA |
| 62 | FWE | - | NC |
| 63 | NMI(L) | - | NC |
| 64 | X2 | - | TIMER CLOCK (32.768KHz) |
| 65 | X1 | - | TIMER CLOCK (32.768KHz) |
| 66 | RES(L) | - | RESET TERMINAL (RESET ON:L) |
| 67 | OSC1(IN) | - | MAIN SYSTEM CLOCK(10MHz) |
| 68 | VSS | - | GND |
| 69 | OSC2(OUT) | - | MAIN SYSTEM CLOCK(10MHz) |
| 70 | VCC | - | SYSTEM POWER |
| 71 | MODE | - | NC |
| 72 | TU_A_MUTE(H) | OUT | TUNER AUDIO MUTE CONTROL (MUTE:H) |
| 73 | TU_V_MUTE(H) | OUT | TUNER VIDEO CONTROL (MUTE:H) |
| 74 | A.MUTE(H) | OUT | AUDIO MUTE CONTROL (MUTE:H) |
| 75 | I2C_CLK2 | OUT | SERIAL DATA TRANSFER CLOCK FOR MEMORY IC |
| 76 | I2C_DATA2 | IN/OUT | SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC |
| 77 | DV_A.MUTE/FF/REW(L) | OUT | DV AUDIO MUTE CONTROL (MUTE:H)/NC/NC |
| 78 | DV_P.MUTE(H) | OUT | DV PICTURE MUTE CONTROL (MUTE:H) |
| 79 | SUB_RESET/EXP_CLK | OUT | SUB CPU RESET/NC |
| 80 | V.P.CTL | OUT | V.PULSE CONTROL, V COMPENSATION DURING SPECIAL PLAYBACK |
| 81 | EDS_CS/PAL.PB(H) | OUT | NC/PLAYBACK MODE FOR PAL:H |
| 82 | VCC | - | SYSTEM POWER |
| 83 | SLOW_P/CNR_CTL | OUT | MEMORY TIMING CONTROL IN THE SLOW MODE / NC |
| 84 | VSS | - | GND |
| 85 | SP_SHORT(H) | OUT | MODE SELECT |
| 86 | LP_SHORT(H) | OUT | MODE SELECT |
| 87 | FLY_ON(H)/VHS(H) | OUT | FLYING ERASE ON:H/NC |
| 88 | H.REC_ST(H) | OUT | HIFI AUDIO SOUND RECORDING START |
| 89 | TRICK(H)/M_TRICK(L) | OUT | SPECIAL PLAYBACK: H/REC AFC FILTER, PB APC FILTER, BURST ACC FILTER, COLOR KILLER DET FILTER |
| 90 | B.BACK(H)/P.SAVE(L) | OUT | BLUE BACK MODE:H/NC |
| 91 | OSD_CS | OUT | CHIP SELECT FOR THE ON-SCREEN IC |
| 92 | SYNC_DET(H) | IN | DETECTION OF VIDEO SYNC SIGNAL (DETECTED:H) |
| 93 | BS_P.CTL(H)/MESECAM(H) | OUT | NC/MESECAM:H |
| 94 | JSB/STLB/S1_DC | IN | INPUT FOR THE JOG SHUTTLE/NC |
| 95 | SHTL(L)/JOGA | IN | INPUT FOR THE JOG SHUTTLE |
| 96 | S_CASS(H) | IN | DETECTION SIGNAL FOR S VHS CASSETTE(S VHS:H) |
| 97 | JSA/STLA | IN | INPUT FOR THE JOG SHUTTLE |
| 98 | C.SYNC | IN | COMPOSITE SYNC |
| 99 | A.FF | OUT | AUDIO FF OUTPUT |
| 100 | V.FF | OUT | ROTATION DETECTION SIGNAL FOR DRUM MOTOR/TIMING CONTROL SIGNAL FOR REC |
| 101 | CAPPWM | OUT | CAPSTAN MOTOR CONTROL |
| 102 | DRUMPWM | OUT | DRUM MOTOR CONTROL |
| 103 | SUB_OSD_ON/V_UP(H) | OUT | OSD IC CONTROL FOR MULTI DUBBING DISPLAY MODE:H/NC |
| 104 | SUB_CS/EXP2_DATA | OUT | TRANSMISSION START SIGNAL TO SUB CPU/NC |
| 105 | SP(H) | - | NC |
| 106 | P.MUTE(L) | OUT | PICTURE CONTROL (MUTE:L) |
| 107 | DPG | IN | DRUM PICKUP PULSE INPUT (SWITCHING PULSE) |
| 108 | DFG | IN | DRUM FG PULSE INPUT |
| 109 | VCC | - | SYSTEM POWER |
| 110 | V.PULSE | OUT | V.PULSE ADDITION TIMING CONTROL |
| 111 | VSS | - | GND |
| 112 | CTLREF | - | CTL REFERENCE VOLTAGE |

## 4.37 SYSTEM CONTROL BLOCK DIAGRAM (VHS)



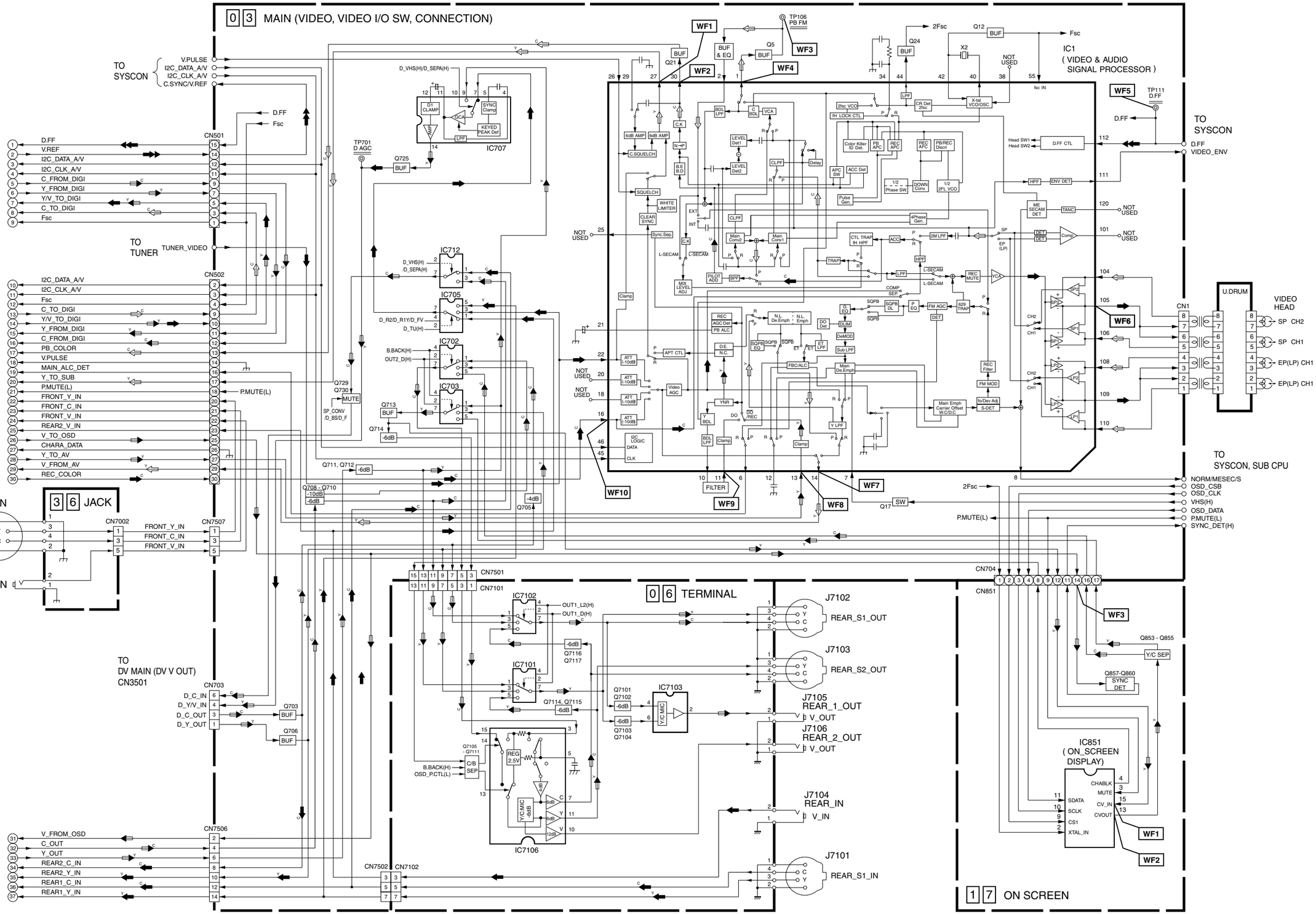

NOTES : For the waveforms in this block diagram, refer to page 4-71.

## 4.38 VIDEO BLOCK DIAGRAM (VHS)



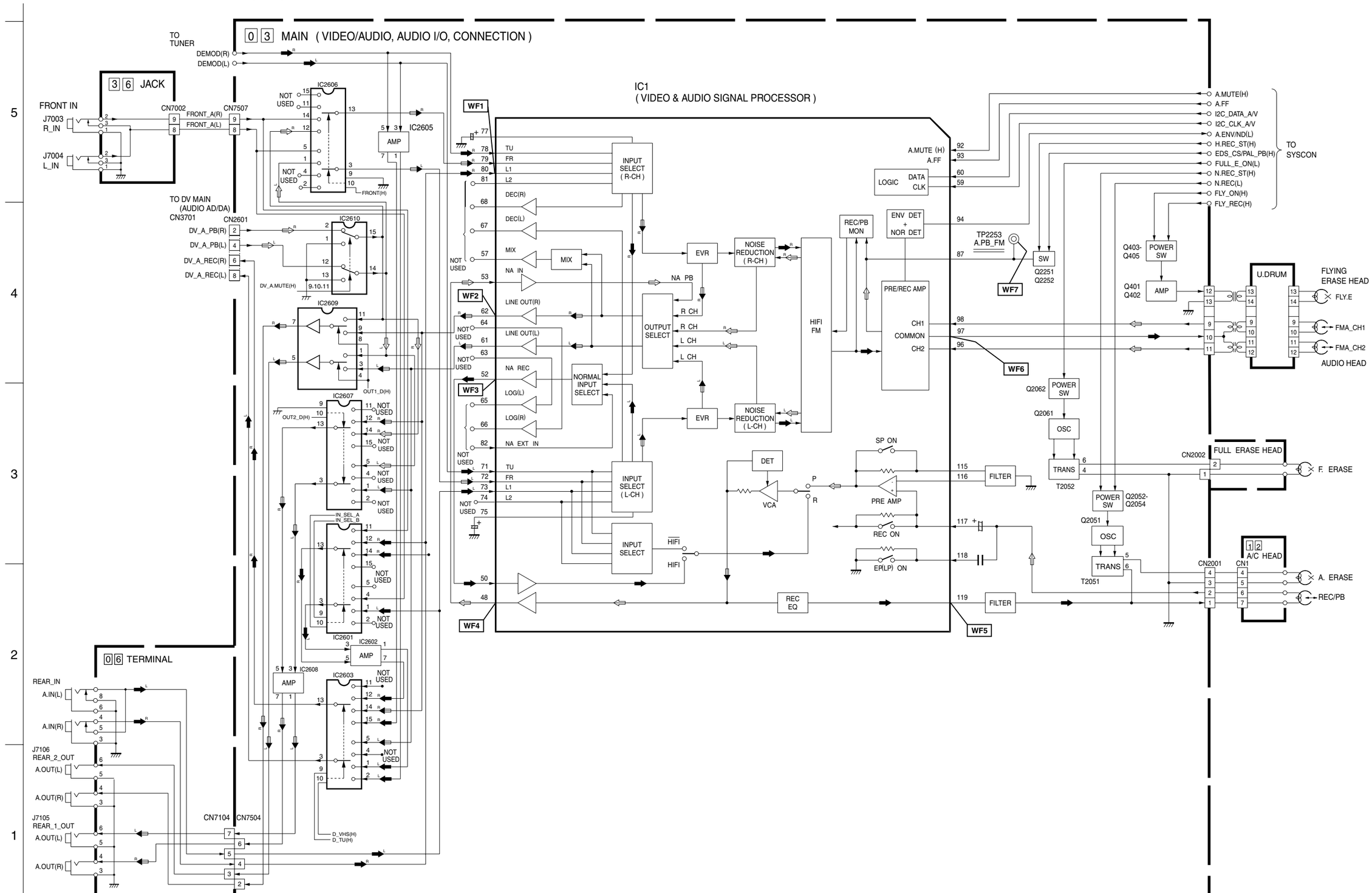

NOTES : For the waveforms in this block diagram, refer to page 4-71.

# 0 3 MAIN (VIDEO, VIDEO I/O SW, CONNECTION)



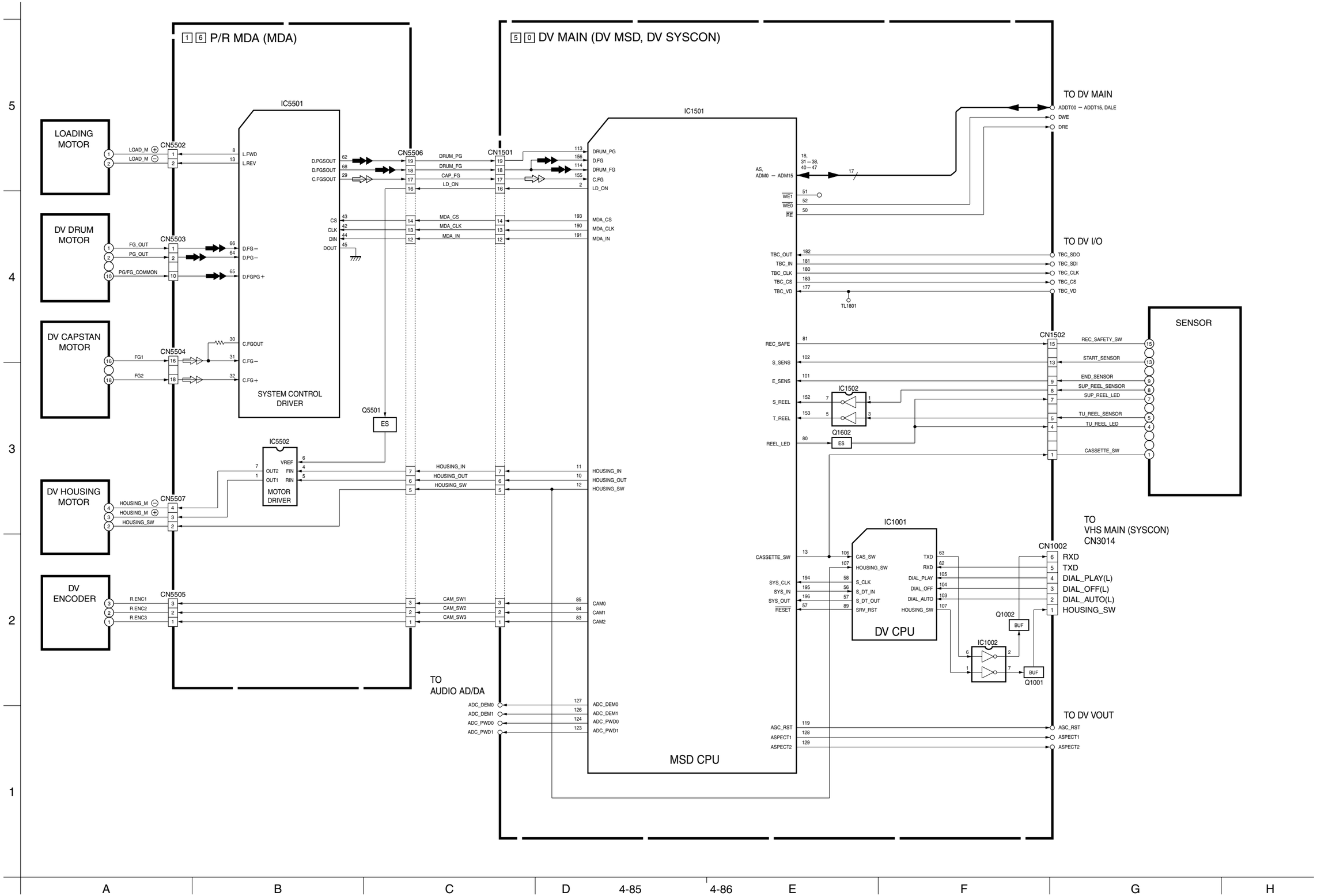

NOTES : For the waveforms in this block diagram, refer to page 4-71.

## 4.39 AUDIO BLOCK DIAGRAM (VHS)

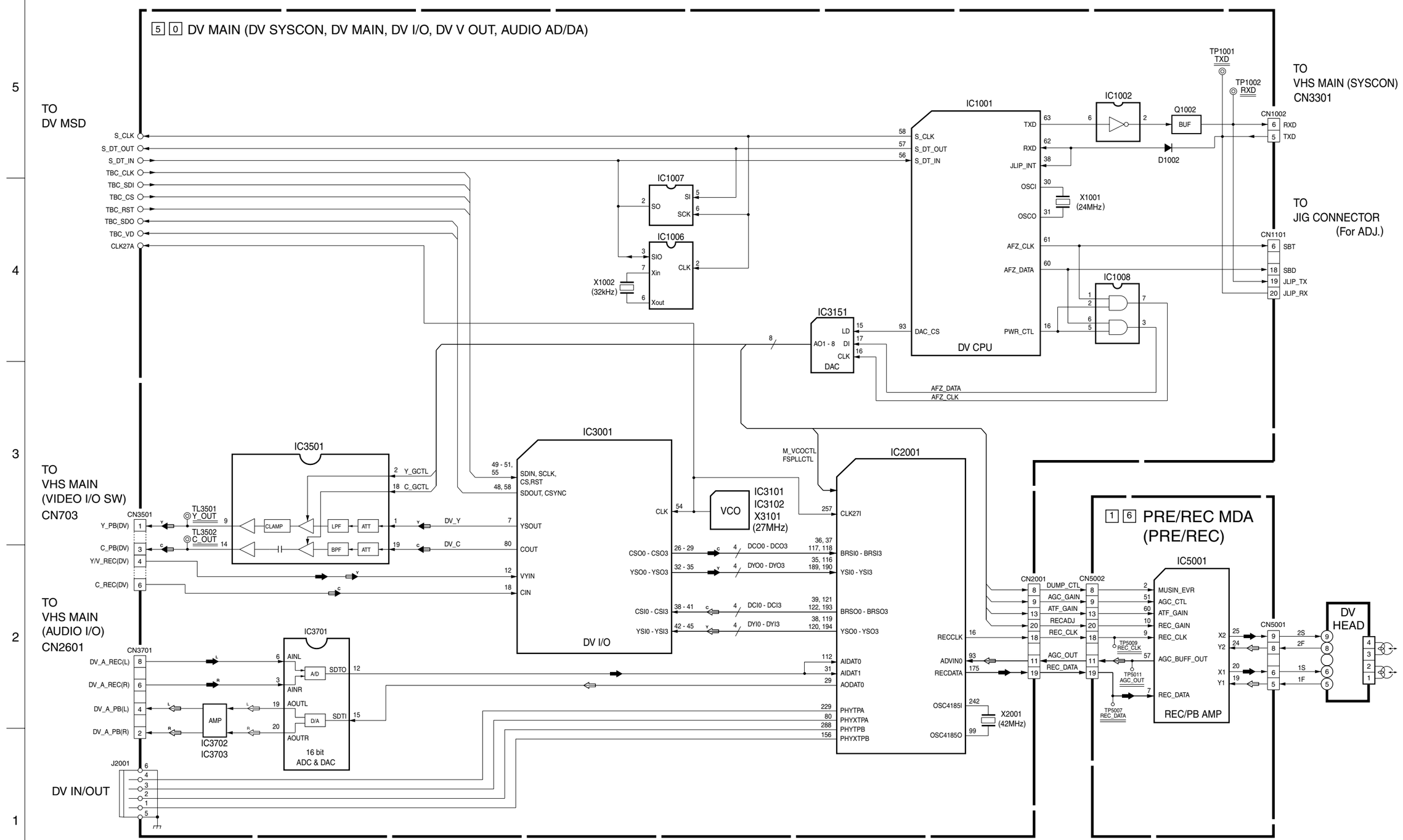



NOTES : For the waveforms in this block diagram, refer to page 4-71.

## 4.40 SYSTEM CONTROL BLOCK DIAGRAM (DV)



## 4.41 VIDEO BLOCK DIAGRAM (DV)



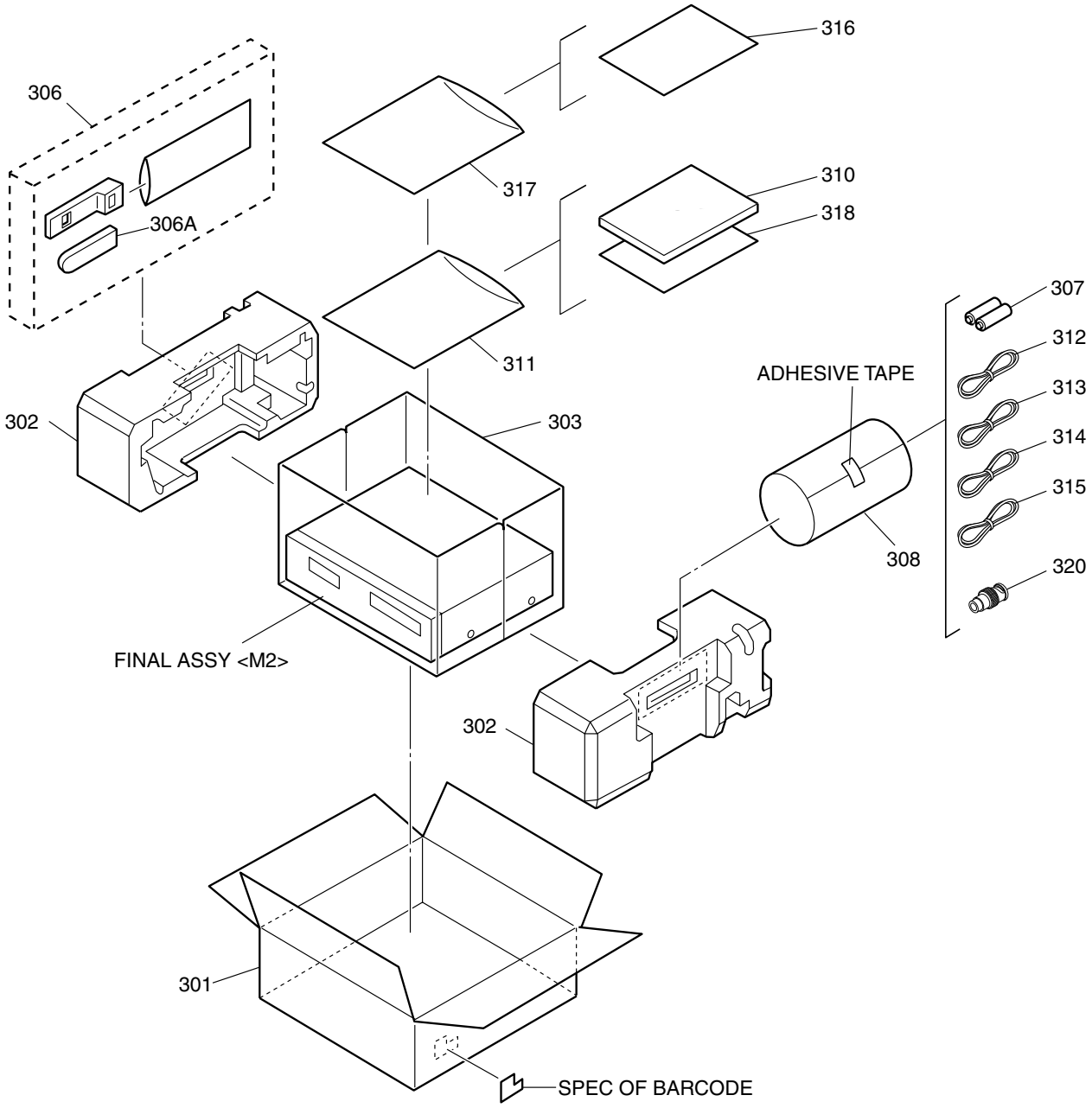
# SECTION 5
# PARTS LIST

## SAFETY PRECAUTION

**Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.**

### 5.1 PACKING AND ACCESSORY ASSEMBLY <M1>

**The instruction manual to be provided with this product will differ according to the destination.**

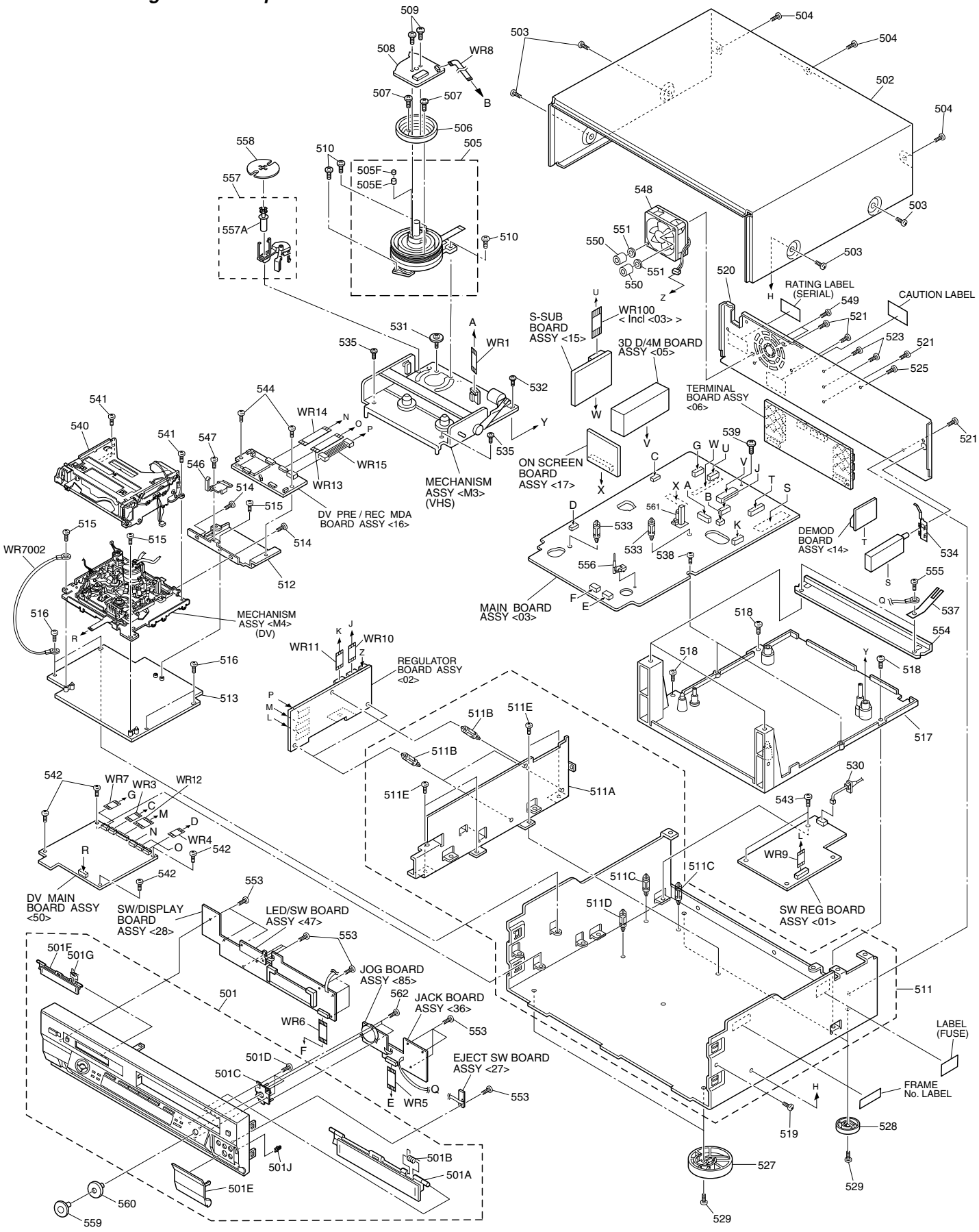



| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION |
|---|---|---|---|---|
| ********** | | | | |
| | | | **PACKING AND ACCESSORY ASSEMBLY <M1>** | |
| | | 301 | LP30823-011A | PACKING CASE |
| | | 302 | LP30868-001B | CUSHION ASSY |
| | | 303 | PQM30021-105 | POLY BAG |
| | | 306 | LP20465-014A | REMOTE CONTROLLER |
| | | 306A | LP40254-001B | COVER(BATTERY) |
| | | 307 | – | BATTERY,X2("AA"TYPE) |
| | | 308 | QPC02202230P | POLY BAG |
| | ⚠ | 310 | LPT0589-002A | INST.BOOK(FR) |
| | ⚠ | | LPT0589-001A | INST.BOOK(EN) |
| | | 311 | QPC02503530P | POLY BAG |
| | | 312 | PEAC0294-04 | RF CABLE |
| | | 313 | QAL0095-005 | LED CABLE ASSY(Satellite Controller) |
| | | 314 | QAM0310-001 | CABLE ASSY(AUDIO/VIDEO) |
| | | 315 | QAM0004-002 | S CABLE |
| | | 316 | BT-51010-2 | WARRANTY CARD |
| | | 317 | PQ33909 | POLY BAG |
| | | 318 | BT-51024-1 | SER.NET CARD |
| | | 320 | QAM0259-001 | ADAPTOR PLUG |

## 5.2 FINAL ASSEMBLY <M2>

### BEWARE OF BOGUS PARTS

***Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.***

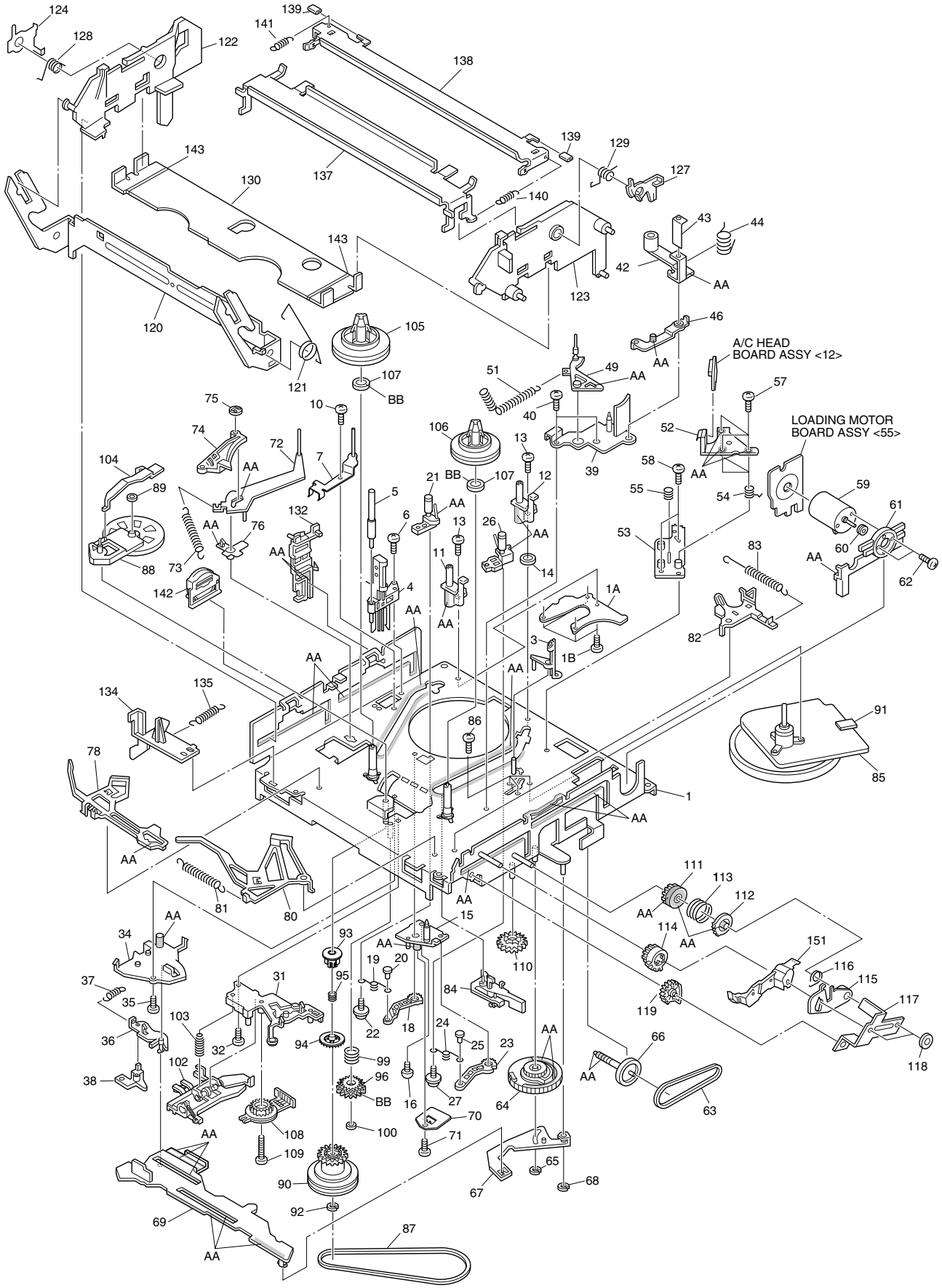


| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION |
|---|---|---|---|---|
| ********** | | | | |

## FINAL ASSEMBLY <M2>

| | | | |
|---|---|---|---|
| ⚠ | 501 | LP10331-011A | FRONT PANEL ASSY |
| | 501A | LP20968-008A | CASSETTE DOOR,VHS |
| | 501B | PQ46448 | TORSION SPRING,VHS |
| | 501C | LP30757-001A | BASE(J/S) |
| | 501D | QYTDSF2608Z | SCREW,X3 |
| | 501E | LP30763-010A | DOOR(JACK) |
| | 501F | LP30756-003A | CASSETTE DOOR(DV) |
| | 501G | LP40688-001A | SPRING(DV) |
| | 501J | PU60109 | CATCHER |
| ⚠ | 502 | LP10128-004A | TOP COVER |
| | 503 | QYTDST3006M | SCREW,X4 TOP COVER(SIDE) |
| | 504 | QYTDST3006M | SCREW,X3 TOP COVER(REAR) |
| | 505 | LP20617-008A | DRUM SUB ASSY |
| | 505E | LP40323-001A | CONTACT |
| | 505F | LP30004-014A | COMPRESSION SPRING |
| | 506 | PDZ0179-1-4 | ROTOR ASSY |
| | 507 | QYSPSP3006Z | SCREW,X2 |
| ⚠ | 508 | QAR0119-001 | STATOR ASSY |
| | 509 | QYSPSPH2606Z | SCREW,X2 |
| | 510 | QYTDST2610Z | SCREW,X3 DRUM |
| ⚠ | 511 | LP10156-003B | BOTTOM CHASSIS ASSY |
| | 511A | LP10130-002B | BRACKET(1) |
| | 511B | PEME0834 | SPACER (BOARD),X3 |
| | 511C | LP40696-001A | HOLDER(BOARD),X2 |
| | 511D | LP40696-002A | HOLDER(BOARD) |
| | 511E | QYTDST3006Z | SCREW,X4 |
| | 512 | LP30352-001B | BRACKET(DV),MECHA |
| | 513 | LP20359-001B | BASE(2),DV MECHA |
| | 514 | QYTDST2004Z | SCREW,X2 DV MECHA |
| | 515 | QYTDSF2606Z | SCREW,X3 DV MECHA |
| | 516 | QYTDST3006Z | SCREW,X4 BASE(2) |
| | 517 | LP20939-001C | BASE(1),VHS |
| | 518 | QYTDST3006Z | SCREW,X3 BASE(1) |
| | 519 | QYTDSF3010Z | SCREW,BOTTOM CHASSIS |
| ⚠ | 520 | LP10339-003A | REAR COVER |
| | 521 | QYTDST3006M | SCREW,X4 REAR COVER |
| | 523 | QYTDSF3008M | SCREW,X2 RCA |
| | 525 | QYTDSF3008M | SCREW,S JACK |
| | 527 | PQ46617B-1 | FOOT ASSY,X2 |
| | 528 | PQ35504 | FOOT(2),X2 |
| | 529 | QYTDST3006Z | SCREW,X4 |
| ⚠ | 530 | QMPD190-170-K | POWER CORD |
| | 531 | PQ40413 | SPECIAL SCREW,VHS MECHA |
| | 532 | QYTDSF4012Z | SCREW,MECHA |
| | 533 | LP40226-001A | PC SUPPORT,X2 |
| | 534 | PQ21623-2-5 | EARTH PLATE(RF) |
| | 535 | QYTDSF3010Z | SCREW,X2 VHS MECHA |
| | 537 | PQ41556 | EARTH PLATE |
| | 538 | QYTDSF3010Z | SCREW,X2 VHS MAIN |
| | 539 | QYTDST3006Z | SCREW,VHS MAIN |
| | 540 | LY30428-004A | CASSETTE HOUSING ASSY,DV |
| | 541 | QYTDSP2004Z | SCREW,X2 |
| | 542 | QYTDST3006Z | SCREW,X4 DV MAIN |
| | 543 | QYTDST3006Z | SCREW,X2 SW.RWG |
| | 544 | QYTDST3006Z | SCREW,X2 PRE/REC MDA |
| | 546 | LP30553-001A | EARTH PLATE |
| | 547 | QYTDST2004Z | SCREW,DV CASS.HOUSING |
| | 548 | QAR0121-001 | FAN MOTOR |
| | 549 | QYTDSP4030M | SCREW,X2 |
| | 550 | QYNNS4000Z | NUT,X2 |
| | 551 | QYWLS4277A0Z | SPRING WASHER,X2 |
| | 553 | QYTDSF2606Z | SCREW,X13 FRONT |
| | 554 | LP30312-001B | BRACKET(CHASSIS) |
| | 555 | QYTDSF3010Z | SCREW,X2 |
| | 556 | LP40407-001A | KNOB ASSY |
| | 557 | LP40370-001E | ROLLER ARM ASSY |
| | 557A | PDM4311A-1 | ROLLER ASSY |
| | 558 | PQ44230 | INERTIA PLATE |
| | 559 | LP30760-002B | KNOB(JOG) |
| | 560 | LP30761-002B | KNOB(SHUTTLE) |
| | 561 | LP40253-001B | STOPPER |
| | 562 | QYTDSF2606Z | SCREW,X3 JOG |
| | WR1 | WJT0005-002A | E-CARD WIRE,A/C HEAD CN2001 |
| | WR3 | QUQ210-0830CC | FFC WIRE,DV MAIN CN2601 |
| | WR4 | QUQ210-0620CC | FFC WIRE,DV MAIN CN3014 |
| | WR5 | QUQ112-1610CG | FFC WIRE,FRONT CN7507 |
| | WR6 | QUQ112-1810CG | FFC WIRE,FRONT CN3011 |
| | WR7 | QJN019-063411 | SHI CR C-C WIRE,DV MAIN CN703 |
| | WR8 | QUQ212-0516CG | FFC WIRE,DRUM CN3001 |
| | WR9 | QUQ212-1910CG | FFC WIRE,SW/REG CN5301 |
| | WR10 | QUQ212-1128CG | FFC WIRE,REG CN7508 |
| | WR11 | QUQ212-1336CG | FFC WIRE,REG CN7509 |
| | WR12 | QJJ001-101400 | SIN CR C-C WIRE,DV MAIN CN532 |
| | WR13 | QUQ105-2010AA | FFC WIRE,DV PRE/REC CN1501 |
| | WR14 | QUQ105-2610AA | FFC WIRE,DV PRE/REC CN2001 |
| | WR15 | QJJ001-051100 | SIN CR C-C WIRE,DV PRE/REC CN5324 |
| | WR7002 | QUB220-05XLXL | SIN TWIST WIRE |

## 5.3 MECHANISM ASSEMBLY (VHS) <M3>




| Classification | Part No. | Symbol in drawing |
|---|---|---|
| Grease | KYODO-SH-P | AA |
| Oil | COSMO-HV56 | BB |

**NOTE:** This section indicates that the grease and oil are to be applied on locations marked with **AA** and **BB**.
During checking and servicing, check if grease has been applied on the locations marked with **AA** and oil on the locations marked with **BB**.

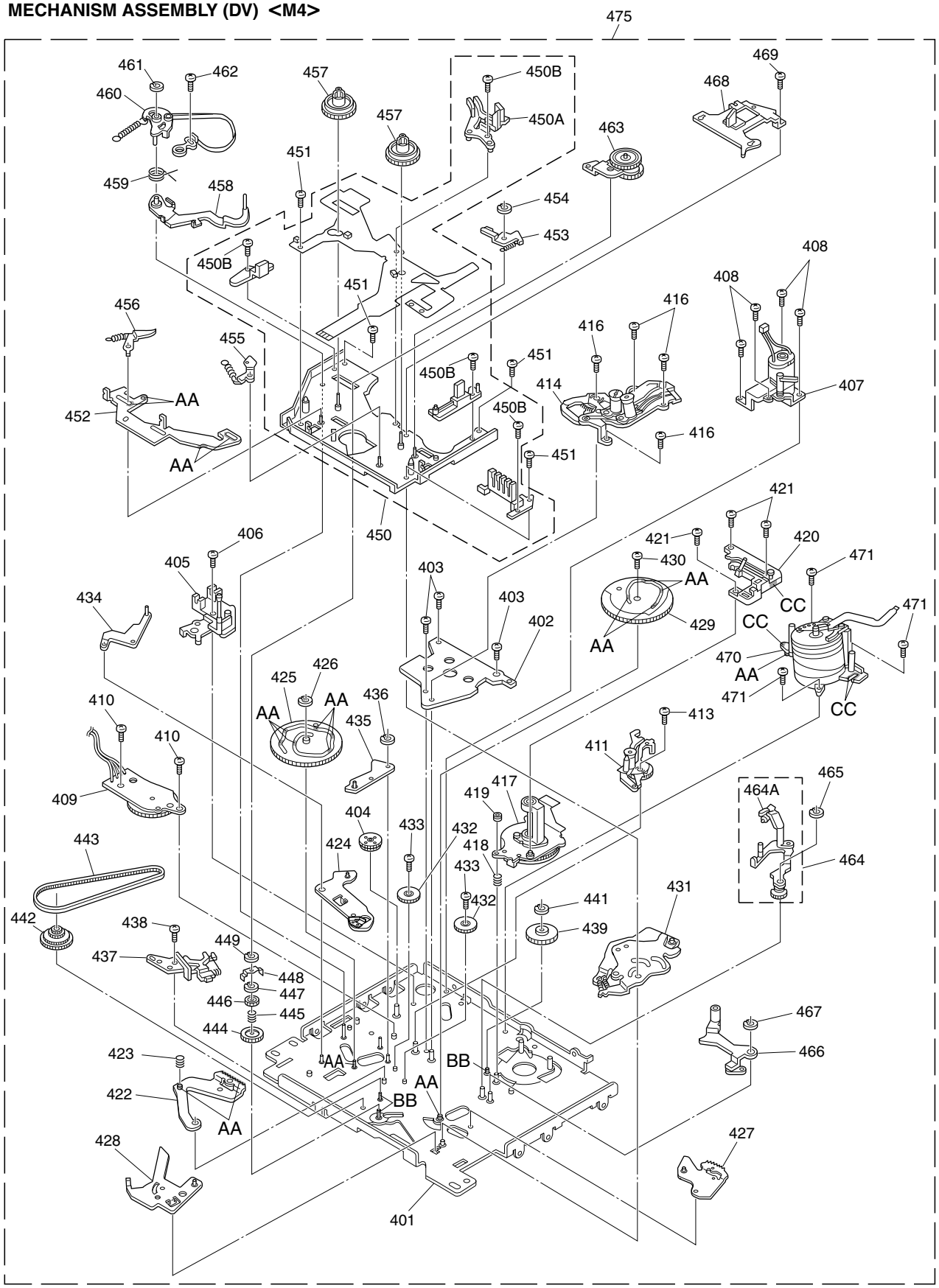
| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION |
|---|---|---|---|---|

**********

## MECHANISM ASSEMBLY(VHS) <M3>

| | | | |
|---|---|---|---|
| | | 1 | LP20821-002F | MAIN DECK ASSY |
| | | 1A | LP40275-004B | PLATE(SUPPLY) |
| | | 1B | QYTDST2605Z | SCREW,X4 |
| | | 3 | LP30492-002B | GIDE POLE GUARD |
| | | 4 | NAH0001-001 | FULL ERASE HEAD |
| | | 5 | LP40098-001B | GUIDE POLE(SUPPLY) |
| | | 6 | QYTDST2608Z | SCREW |
| | | 7 | LP40637-002A | TENSION STUD BASE ASSY |
| | | 10 | QYTDST2606Z | SCREW |
| | | 11 | LP30409-002C | UV CATCHER 2(SUPPLY) |
| | | 12 | LP30409-002C | UV CATCHER 2(TAKE UP) |
| | | 13 | QYTPST2606Z | SCREW,X2 |
| | | 14 | PQ40919-10 | SPACER |
| | | 15 | LP30223-003C | LOADING ARM GEAR SHAFT |
| | | 16 | QYTDST2606Z | SCREW |
| | | 18 | LP30224-001B | LOADING ARM GEAR(SUPPLY) |
| | | 19 | LP40099-001A | TORSION ARM |
| | | 20 | LP40100-001A | PIN |
| | | 21 | LP40101-006A | POLE BASE ASSY(SUPPLY) |
| | | 22 | QYSPSTG2606Z | SCREW |
| | | 23 | LP40103-002B | LOADING ARM GEAR(TAKE UP) |
| | | 24 | LP40099-001A | TORSION ARM |
| | | 25 | LP40100-001A | PIN |
| | | 26 | LP40104-006A | POLE BASE ASSY(TAKE UP) |
| | | 27 | QYSPSTG2606Z | SCREW |
| | | 31 | LP20233-004B | ROTARY ENCODER GUIDE |
| | | 32 | QYTPST2606Z | SCREW |
| | | 34 | LP30226-004E | CONTROL PLATE GUIDE |
| | | 35 | QYTPST2605Z | SCREW |
| | | 36 | LP30249-003B | TAKE UP LEVER |
| | | 37 | LP30003-006A | TENSION SPRING |
| | | 38 | LP40119-002A | T.UP HEAD |
| | | 39 | LP20234-004B | LID GUIDE |
| | | 40 | QYTDST2606Z | SCREW,X2 |
| | | 42 | LP40105-003A | PINCH ROLLER ARM ASSY |
| | | 43 | LP40753-001A | PINCH ROLLER SHEET 3 |
| | | 44 | LP40148-002A | TORSION SPRING |
| | | 46 | LP40149-001C | PRESS LEVER ASSY |
| | | 49 | LP40106-007A | GUIDE ARM ASSY |
| | | 51 | LP40134-001C | TENSION SPRING |
| | | 52 | QAH0010-004 | AC HEAD |
| | | 53 | LP30228-001A | HEAD BASE |
| | | 54 | LP30004-013A | COMPRESSION SPRING,X3 |
| | | 55 | LP40236-001A | COMPRESSION SPRING |
| | | 57 | LP40213-002B | SPECIAL SCREW,X3 |
| | | 58 | QYTDST2608Z | SCREW,X2 |
| | | 59 | QAR0023-001 | LOADING MOTOR |
| | | 60 | PQ43546-1-2 | MOTOR PULLEY |
| | | 61 | LP30230-001B | MOTOR GUIDE |
| | | 62 | QYTPSP3003Z | SCREW,X2 |
| | | 63 | LP30005-003A | BELT,LOADING MOTOR |
| | | 64 | LP20791-002D | CONTROL CAM |
| | | 65 | PQM30017-24 | SLIT WASHER |
| | | 66 | LP40120-001A | WORM GEAR |
| | | 67 | LP40107-002A | LINK LEVER ASSY |
| | | 68 | PQM30017-24 | SLIT WASHER |
| | | 69 | LP10284-002E | CONTROL PLATE |
| | | 70 | LP40379-001B | CONTROL BRACKET(1) |
| | | 71 | QYTDSF2608M | SCREW |
| | | 72 | LP40108-002A | TENSION ARM ASSY |
| | | 73 | LP30003-010A | TENSION SPRING |
| | | 74 | LP40109-003D | TENSION BRAKE ASSY |
| | | 75 | PQ46302-1-3 | ADJUST PIN |
| | | 76 | LP30232-002A | TENSION ARM BEARING |
| | | 78 | LP40532-009B | MAIN BRAKE ASSY (SUPPLY) |
| | | 80 | LP40111-014C | MAIN BRAKE ASSY (TAKE UP) |
| | | 81 | LP30003-029A | TENSION SPRING |
| | | 82 | LP40112-001F | SUB BRAKE ASSY(TAKE UP) |
| | | 83 | LP40357-001B | TENSION SPRING |
| | | 84 | LP40461-001A | CAPSTAN BRAKE ASSY |
| | | 85 | QAR0132-001 | CAPSTAN MOTOR |
| | | 86 | QYTDSF2606M | SCREW,X3 |
| | | 87 | LP30005-008A | BELT,CAPSTAN MOTOR |
| | | 88 | LP40114-011B | IDLER ARM ASSY |
| | | 89 | LP30016-001A | SLIT WASHER |
| | | 90 | LP40593-003B | CLUTCH UNIT 3 |
| | | 91 | LP30002-097A | SPACER |
| | | 92 | PQM30017-47 | SLIT WASHER |
| | | 93 | LP30696-002A | CLUTCH GEAR 4 |
| | | 94 | LP30697-003A | COUPLING GEAR |
| | | 95 | LP40554-002A | COMPRESSION SPRING |
| | | 96 | LP40442-001A | DIRECT GEAR |
| | | 99 | LP40483-002A | COMPRESSION SPRING |
| | | 100 | LP30016-001A | SLIT WASHER |
| | | 102 | LP40484-003B | CHANGE LEVER ASSY |
| | | 103 | LP40512-002B | COMPRESSION SPRING |
| | | 104 | LP30236-002C | IDLER LEVER |
| | | 105 | LP20237-003B | REEL DISK ASSY(SUPPLY) |
| | | 106 | LP20238-003B | REEL DISK ASSY(TAKE UP) |
| | | 107 | LP30017-015A | SPACER,X2 |
| | | 108 | QSW0554-003 | ROTARY ENCODER |
| | | 109 | LP40746-001A | SPECIAL SCREW |
| | | 110 | LP30237-002B | CASSETTE GEAR |
| | | 111 | LP30239-002G | LIMIT GEAR(1) |
| | | 112 | LP30240-002G | LIMIT GEAR(2) |
| | | 113 | LP40136-001E | TORSION SPRING |
| | | 114 | LP30242-002A | RELAY GEAR |
| | | 115 | LP30339-002E | OPENER GUIDE |
| | | 116 | LP40545-001A | TORSION SPRING |
| | | 117 | LP40214-001B | C.H.BRACKET |
| | | 118 | PQM30017-47 | SLIT WASHER,X2 |
| | | 119 | LP30243-001D | DRIVE GEAR |
| | | 120 | LP20240-001G | DRIVE ARM |
| | | 121 | LP40137-001A | TORSION SPRING |
| | | 122 | LP10081-002L | SIDE HOLDER(L) |
| | | 123 | LP10082-002M | SIDE HOLDER(R) |
| | | 124 | LP30255-006A | LOCK LEVER(L) |
| | | 127 | LP30256-001H | LOCK LEVER(R) |
| | | 128 | LP40168-003A | TORSION SPRING(L) |
| | | 129 | LP40218-001B | TORSION SPRING(R) |
| | | 130 | LP30257-001G | CASSETTE HOLDER |
| | | 132 | LP30244-002G | GUIDE RAIL |
| | | 134 | LP30245-002F | REC SAFETY LEVER |
| | | 135 | LP30003-004A | TENSION SPRING |
| | | 137 | LP20578-001C | TOP GUIDE |
| | | 138 | LP30500-001C | HOLD PLATE |
| | | 139 | LP40450-003A | PAD,X2 |
| | | 140 | LP30003-025B | TENSION SPRING |
| | | 141 | LP30003-024A | TENSION SPRING |
| | | 142 | LP40481-003A | ROLLER CAM ASSY |
| | | 143 | LP30019-014A | PAD,X2 |
| | | 151 | LP20324-003B | DOOR OPENER |

## 5.4 MECHANISM ASSEMBLY (DV) <M4>




| Classification | Part No. | Symbol in drawing |
|---|---|---|
| Grease | KYODO-SH-P | AA |
| Oil | YTU94027 | BB |
| Grease | RX-410R | CC |

**NOTES:** • This section indicates that the grease and oil are to be applied on locations marked with **AA**, **BB** and **CC**.
During checking and servicing, check if grease has been applied on the locations marked with **AA**, **CC** and oil on the locations marked with **BB**.
• Apply also grease and oil on some locations in the main cam gear and the cam groove at the rear side of the sub cam gear.

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION |
|---|---|---|---|---|

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## MECHANISM ASSEMBLY(DV) <M4>

| | | | | |
|---|---|---|---|---|
| | | 401 | LY10062-001B | MAIN DECK ASSY |
| | | 402 | LY30358-001A | DRUM BASE DECK |
| | | 403 | YQ43893 | MINI SCREW,X3 |
| | | 404 | LY30343-001A | WORM WHEEL 2 |
| | | 405 | LY40237-001C | ENT.GUIDE BASE ASSY |
| | | 406 | YQ43893 | MINI SCREW |
| | | 407 | LY30340-001C | MOTOR BRACKET ASSY |
| | | 408 | YQ43893 | MINI SCREW,X4 |
| | | 409 | LY41190-001B | ROTARY ENCODER ASSY |
| | | 410 | YQ43893 | MINI SCREW,X2 |
| | | 411 | YQ31873B-30 | GUIDE RAIL ASSY(SUPPLY) |
| | | 413 | YQ43893 | MINI SCREW |
| | | 414 | LY20097-001C | GUIDE RAIL ASSY(TAKE UP) |
| | | 416 | YQ43893 | MINI SCREW,X4 |
| | | 417 | QAR0012-002 | CAPSTAN MOTOR |
| | | 418 | LY30002-003A | COMPRESSION SPRING |
| | | 419 | LY41390-001A | ADJUST NUT |
| | | 420 | LY30345-001A | MIDDLE CATCHER ASSY |
| | | 421 | YQ43893 | MINI SCREW,X3 |
| | | 422 | LY40223-001A | ARM GEAR 1 ASSY |
| | | 423 | LY40224-001A | COLLAR |
| | | 424 | LY40235-002B | CENTERRING ARM ASSY |
| | | 425 | LY10060-002A | MAIN CAM |
| | | 426 | YQ44246 | SLIT WASHER |
| | | 427 | LY40279-001A | ARM GEAR 2 ASSY |
| | | 428 | LY40228-001A | CLUTCH LOCK LEVER ASSY |
| | | 429 | LY20102-001A | SUB CAM |
| | | 430 | YQ43893 | MINI SCREW |
| | | 431 | LY30347-001A | CHARGE ARM ASSY |
| | | 432 | YQ44560-1-2 | CONNECT GEAR 2 |
| | | 433 | YQ43893 | MINI SCREW,X2 |
| | | 434 | LY40236-001A | TENSION CONTROL ARM ASSY |
| | | 435 | LY40233-001A | BRAKE CONTROL ARM ASSY |
| | | 436 | YQ44246 | SLIT WASHER |
| | | 437 | LY40242-001C | BASE PLATE ASSY |
| | | 438 | YQ43893 | MINI SCREW |
| | | 439 | YQ43931A | REEL DRIVE PULLEY ASSY |
| | | 441 | YQ44246 | SLIT WASHER |
| | | 442 | LY40239-001B | CENTER GEAR ASSY |
| | | 443 | LY40241-001A | TIMING BELT |
| | | 444 | LY40246-001A | CLUTCH LOCK GEAR (1) |
| | | 445 | LY30002-009A | COMPRESSION SPRING |
| | | 446 | LY40247-001A | CLUCH LOCK GEAR (2) |
| | | 447 | YQ43933-2 | WASHER |
| | | 448 | LY40248-001A | PUSH PLATE |
| | | 449 | YQ44246 | SLIT WASHER |
| | | 450 | LYH30012-001B | SUB DECK ASSY(G) |
| | | 450A | LY20108-001B | PRISM |
| | | 450B | YQ43893 | MINI SCREW |
| | | 451 | YQ43893 | MINI SCREW,X4 |
| | | 452 | LY20109-001B | CONTROL PLATE |
| | | 453 | LY40257-001A | SUB BRAKE ASSY |
| | | 454 | YQ44246 | SLIT WASHER |
| | | 455 | LY40259-001A | MAIN BRAKE ASSY(TAKE UP) |
| | | 456 | LY40260-001B | MAIN BRAKE ASSY(SUPPLY) |
| | | 457 | LY40255-001A | REEL DISK ASSY,X2 |
| | | 458 | LY41245-001B | TENSION ARM SUB ASSY |
| | | 459 | LY41243-001A | TORSION SPRING |
| | | 460 | LY41246-001C | BAND ARM PLATE SUB ASSY |
| | | 461 | YQ44246-3 | SLIT WASHER |
| | | 462 | YQ43893-7 | MINI SCREW |
| | | 463 | LY30370-001F | SWING ARM ASSY |
| | | 464 | LY30380-001D | EXIT GUIDE ARM ASSY |
| | | 464A | LY41250-001A | CLEANER ARM ASSY |
| | | 465 | YQ44246 | SLIT WASHER |
| | | 466 | LY30374-001B | PINCH ROLLER ARM ASSY |
| | | 467 | YQ44246 | SLIT WASHER |
| | | 468 | LY40280-001B | REEL COVER ASSY |
| | | 469 | YQ43893 | MINI SCREW |
| | | 470 | YDV2089B | DRUM ASSY |
| | | 471 | YQ43893 | MINI SCREW,X3 |
| | | 475 | YMA0024D | MECHA ASSY(A) |

## 5.5 ELECTRICAL PARTS LIST

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION |
|---|---|---|---|---|
| ********** | | | | |
| | | | **SW REGULATOR BOARD ASSEMBLY <01>** | |
| | | PW1 | LPA10119-04A1 | SW.REG BOARD ASSY |
| | | IC5101 | STR-F6552 | IC |
| | | IC5301 | L5431 | IC |
| | | | or MM1431AT | IC |
| | | Q5301 | 2SD1819A/RS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SC4081/RS/-X | TRANSISTOR |
| | | Q5302 | DTA114EU | TRANSISTOR |
| | | | or PDTA114EU | TRANSISTOR |
| | | | or RN2302 | TRANSISTOR |
| | | | or UN5111 | TRANSISTOR |
| | | D5001 | RBV-404 | DIODE |
| | | D5101 | AU01 | FR DIODE |
| | | | or ERA18-04-T2 | FR DIODE |
| | | | or 1SR153-400-T2 | FR DIODE |
| | | | or 10ELS4 | FR DIODE |
| | | D5102 | AU01Z | FR DIODE |
| | | | or ERA18-02-T2 | FR DIODE |
| | | | or PG104RS | FR DIODE |
| | | | or 1SR153-400-T2 | FR DIODE |
| | | | or 10ELS2 | FR DIODE |
| | | D5103 | 1SS133 | DIODE |
| | | | or 1SS270A | DIODE |
| | | D5104 | AU01 | FR DIODE |
| | | | or ERA18-04-T2 | FR DIODE |
| | | | or 1SR153-400-T2 | FR DIODE |
| | | | or 10ELS4 | FR DIODE |
| | | D5201 | AK04 | DIODE |
| | | | or 1S4 | SB DIODE |
| | | | or 11EQS04 | SB DIODE |
| | | D5202 | FML-12S | FR DIODE |
| | | | or FCF06A20 | FR DIODE |
| | | | or ER602FCT | FR DIODE |
| | | | or SF5LC20U | FR DIODE |
| | | | or YG901C2 | FR DIODE |
| | | D5204 | 1SR153-400-T2 | FR DIODE |
| | | | or PG104RS | FR DIODE |
| | | | or 10ELS2 | FR DIODE |
| | | | or ERA18-02-T2 | FR DIODE |
| | | D5206 | FMB-24 | BARRIER DIODE |
| | | | or FSQ05A04B | SB DIODE |
| | | | or SB640FCT | SB DIODE |
| | | | or SF5SC4 | SB DIODE |
| | | | or YG801C04 | SB DIODE |
| | | D5207 | FMB-24 | BARRIER DIODE |
| | | | or FSQ05A04B | SB DIODE |
| | | | or SB640FCT | SB DIODE |
| | | | or SF5SC4 | SB DIODE |
| | | | or YG801C04 | SB DIODE |
| | | D5208 | AK04 | DIODE |
| | | | or 1S4 | SB DIODE |
| | | | or 11EQS04 | SB DIODE |
| | | D5210 | AU01Z | FR DIODE |
| | | | or PG104RS | FR DIODE |
| | | | or 1SR153-400-T2 | FR DIODE |
| | | | or 10ELS2 | FR DIODE |
| | | | or ERA18-02-T2 | FR DIODE |
| | | D5211 | AU01Z | FR DIODE |
| | | | or ERA18-02-T2 | FR DIODE |
| | | | or PG104RS | FR DIODE |
| | | | or 1SR153-400-T2 | FR DIODE |
| | | | or 10ELS2 | FR DIODE |
| | | D5301 | MTZJ15A | ZENER DIODE |
| | | | or RD15ES/B1/-T2 | ZENER DIODE |
| | | D5303 | MTZJ7.5A | ZENER DIODE |
| | | | or RD7.5ES/B1/-T2 | ZENER DIODE |
| | | D5304 | 1SS133 | DIODE |
| | | | or 1SS270A | DIODE |
| | | D5305 | MTZJ27C | ZENER DIODE |
| | | | or RD27ES/B3/-T2 | ZENER DIODE |
| | | D5306 | MTZJ2.7B | ZENER DIODE |
| | | | or RD2.7ES/B2/-T2 | ZENER DIODE |
| | | D5307 | 1SS133 | DIODE |
| | | | or 1SS270A | DIODE |
| | | D5308 | 1SS133 | DIODE |
| | | | or 1SS270A | DIODE |
| | | D5310 | 1SS133 | DIODE |
| | | | or 1SS270A | DIODE |
| | | D5311 | 1SS133 | DIODE |
| | | | or 1SS270A | DIODE |
| | | D5312 | 1SS133 | DIODE |
| | | | or 1SS270A | DIODE |
| | ⚠ | R5001 | QRZ9046-475Z | RESISTOR 4.7MΩ,1/2W |
| | | R5101 | QRG02GJ-683 | OMF RESISTOR 68kΩ,2W |
| | | R5102 | QRE141J-1R0Y | RESISTOR 1Ω,1/4W |
| | | R5103 | NRSA02J-332X | MG RESISTOR 3.3kΩ,1/10W |
| | | R5104 | QRE141J-681Y | RESISTOR 680Ω,1/4W |
| | | R5105 | QRT01DJ-R47X | MF RESISTOR 0.47Ω,1W |
| | | R5106 | QRG02GJ-683 | OMF RESISTOR 68kΩ,2W |
| | | R5302 | NRSA02J-472X | MG RESISTOR 4.7kΩ,1/10W |
| | | R5303 | NRVA02D-123X | CMF RESISTOR 12kΩ,1/10W |
| | | R5304 | NRVA02D-302X | CMF RESISTOR 3kΩ,1/10W |
| | | R5305 | NRSA02J-223X | MG RESISTOR 22kΩ,1/10W |
| | ⚠ | R5306 | QRZ9005-470X | FUSI RESISTOR 47Ω,1/4W |
| | | R5307 | NRSA02J-221X | MG RESISTOR 220Ω,1/10W |
| | | R5308 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | | R5309 | NRSA02J-122X | MG RESISTOR 1.2kΩ,1/10W |
| | | R5310 | QRL02DJ-821X | OMF RESISTOR 820Ω,2W |
| | | R5311 | NRSA02J-473X | MG RESISTOR 47kΩ,1/10W |
| | | R5313 | NRSA02J-561X | MG RESISTOR 560Ω,1/10W |
| | | R5314 | NRSA02J-103X | MG RESISTOR 10kΩ,1/10W |
| | | R5316 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | | R5317 | NRSA02J-333X | MG RESISTOR 33kΩ,1/10W |
| | | B5001 | QUY160-100Y | IM BUS WIRE |
| | | B5002 | QUY160-100Y | IM BUS WIRE |
| | | B5003 | QUY160-100Y | IM BUS WIRE |
| | ⚠ | C5001 | QFZ9073-683 | F CAPACITOR 0.068μF,250V |
| | ⚠ | C5002 | QFZ9051-223 | F CAPACITOR 0.022μF,250V |
| | ⚠ | C5004 | QCZ9094-472 | CAPACITOR 0.0047μF,125V |
| | | C5006 | QEZ0516-337 | E CAPACITOR 330μF,200V |
| | | C5102 | QEMU1VM-276 | E CAPACITOR 27μF,35V |
| | | C5103 | QCZ0136-471Z | CAPACITOR 470pF,1kV |
| | | C5104 | QFLC1HJ-471Z | F CAPACITOR 470pF,50V |
| | | C5105 | NCB21EK-333X | CAPACITOR 0.033μF,25V |
| | | C5106 | QCZ0212-472 | CAPACITOR 0.0047μF,1kV |
| | | C5201 | QEMU0JM-227 | E CAPACITOR 220μF,6.3V |
| | | C5202 | QEMT1CM-827 | E CAPACITOR 820μF,16V |
| | | C5203 | QETN1CM-227 | E CAPACITOR 220μF,16V |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C5204 | QEMT1AM-228 | E CAPACITOR | 2200µF,10V |
| | | C5205 | QETN1AM-227 | E CAPACITOR | 220µF,10V |
| | | C5206 | QEMU1EM-187 | E CAPACITOR | 180µF,25V |
| | | C5207 | QETN2AM-475 | E CAPACITOR | 4.7µF,100V |
| | | C5208 | QEMU1HM-186 | E CAPACITOR | 18µF,50V |
| | | C5210 | QEMT1AM-687 | E CAPACITOR | 680µF,10V |
| | | C5211 | QETN1AM-227 | E CAPACITOR | 220µF,10V |
| | | C5212 | QEMT1AM-687 | E CAPACITOR | 680µF,10V |
| | | C5213 | QETN1AM-227 | E CAPACITOR | 220µF,10V |
| | | C5301 | QFLC1HJ-103Z | F CAPACITOR | 0.01µF,50V |
| | | C5302 | QFLC1HJ-473Z | F CAPACITOR | 0.047µF,50V |
| | | C5303 | QFLC1HJ-333Z | F CAPACITOR | 0.033µF,50V |
| | | C5304 | QETN1EM-476 | E CAPACITOR | 47µF,25V |
| | | C5305 | QFLC1HJ-103Z | F CAPACITOR | 0.01µF,50V |
| | | L5201 | PELN1184 | COIL | 33µH |
| | | L5202 | PU60944-330K | COIL | 33µH |
| | | L5203 | PELN1184 | COIL | 33µH |
| | | L5205 | PELN1184 | COIL | 33µH |
| | | K5101 | QQR0678-001Z | FERRITE BEAD | |
| | ⚠ | PC5101 | PC817X | IC(PHOTO COUPLER) | |
| | ⚠ | T5001 | QQS0092-001 | SW TRANSFORMER | |
| | | HS2 | LP40515-001B | HEAT SINK,D5206 | |
| | | ST2 | PU59391 | STYLE PIN | |
| | | OT1 | QYTDST3008Z | SCREW,D5206 | |
| | | FC5001 | QNG0006-001Z | FUSE CLIP,F5001 | |
| | | FC5002 | QNG0006-001Z | FUSE CLIP,F5001 | |
| | ⚠ | LF5002 | QQR0908-001 | LINE FILTER | |
| | ⚠ | CN5001 | QGA7901C3-02 | CONNECTOR,(1-2)AC IN | |
| | | CN5201 | QGF1208C1-19 | FPC CONNECTOR,(1-19)REG | |
| | ⚠ | CP5301 | ICP-N25 | CIRCUIT PROTECTOR | |
| | ⚠ | F5001 | QMF51N2-2R0J1 | FUSE | T2.0A,AC250V |

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## REGULATOR BOARD ASSEMBLY <02>

| | | | |
|---|---|---|---|
| | PW2 | LPA10119-04A2 | REG BOARD ASSY |
| | IC5321 | PQ15RW11 | IC |
| | Q5321 | 2SD2528/QP/ | TRANSISTOR |
| | Q5322 | 2SD1819A/RS/-X | TRANSISTOR |
| | | or 2PC4081/R/-X | TRANSISTOR |
| | | or 2SC4081/RS/-X | TRANSISTOR |
| | Q5323 | 2SA933AS/RS/-T | TRANSISTOR |
| | | or 2SA1267/YG/-T | TRANSISTOR |
| | Q5324 | DTC114EU | TRANSISTOR |
| | | or RN1302 | TRANSISTOR |
| | | or UN5211 | TRANSISTOR |
| | | or PDTC114EU | TRANSISTOR |
| | Q5326 | 2SD2375/QP/ | TRANSISTOR |
| | Q5327 | 2SD1819A/RS/-X | TRANSISTOR |
| | | or 2SC4081/RS/-X | TRANSISTOR |
| | | or 2PC4081/R/-X | TRANSISTOR |
| | Q5328 | 2SD1302/ST/-T | TRANSISTOR |
| | | or 2SD1450/ST/-T | TRANSISTOR |
| | Q5329 | DTA114EU | TRANSISTOR |
| | | or RN2302 | TRANSISTOR |
| | | or UN5111 | TRANSISTOR |
| | | or PDTA114EU | TRANSISTOR |
| | Q5331 | 2SB1068/KU/-T | TRANSISTOR |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | Q5332 | DTC114EU | TRANSISTOR | |
| | | | or PDTC114EU | TRANSISTOR | |
| | | | or UN5211 | TRANSISTOR | |
| | | | or RN1302 | TRANSISTOR | |
| | | Q5335 | 2SB1256 | TRANSISTOR | |
| | | Q5336 | DTC114TU | TRANSISTOR | |
| | | | or UN5215 | TRANSISTOR | |
| | | Q5341 | DTC114EU | TRANSISTOR | |
| | | | or PDTC114EU | TRANSISTOR | |
| | | | or RN1302 | TRANSISTOR | |
| | | | or UN5211 | TRANSISTOR | |
| | | D5323 | 11ES2 | DIODE | |
| | | | or ERA15-02-T2 | DIODE | |
| | | | or 1A3G | DIODE | |
| | | D5324 | 11ES2 | DIODE | |
| | | | or ERA15-02-T2 | DIODE | |
| | | | or 1A3G | DIODE | |
| | | D5325 | RD5.1JS/B2/-T2 | ZENER DIODE | |
| | | | or MA4051N/M/-T2 | ZENER DIODE | |
| | | D5326 | 1SS133 | DIODE | |
| | | | or 1SS270A | DIODE | |
| | | D5327 | RD5.1JS/B2/-T2 | ZENER DIODE | |
| | | | or MA4051N/M/-T2 | ZENER DIODE | |
| | | D5328 | 1SS133 | DIODE | |
| | | | or 1SS270A | DIODE | |
| | | D5329 | 1SS133 | DIODE | |
| | | | or 1SS270A | DIODE | |
| | | D5330 | 1SS133 | DIODE | |
| | | | or 1SS270A | DIODE | |
| | | D5331 | 1SS133 | DIODE | |
| | | | or 1SS270A | DIODE | |
| | | D5333 | 1SS133 | DIODE | |
| | | | or 1SS270A | DIODE | |
| | | D5334 | 11ES2 | DIODE | |
| | | | or ERA15-02-T2 | DIODE | |
| | | | or 1A3G | DIODE | |
| | | D5337 | MTZJ12A | ZENER DIODE | |
| | | | or RD12ES/B1/-T2 | ZENER DIODE | |
| | | R5322 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R5323 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R5324 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R5325 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R5326 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R5327 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R5328 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R5329 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R5330 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R5331 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R5332 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R5333 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R5336 | NRVA02D-472X | CMF RESISTOR | 4.7kΩ,1/10W |
| | | R5337 | NRVA02D-102X | CMF RESISTOR | 1kΩ,1/10W |
| | | R5338 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R5339 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R5340 | QRL01DJ-101X | OMF RESISTOR | 100Ω,1W |
| | | R5345 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R5346 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | B5301 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B5302 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B5303 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B5306 | QUY153-050Y | IM BUS WIRE | |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | B5307 | QUY153-050Y | IM BUS WIRE | |
| | | B5309 | QUY153-050Y | IM BUS WIRE | |
| | | B5310 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | C5321 | QETN1AM-107 | E CAPACITOR | 100µF,10V |
| | | C5322 | QETN1HM-106 | E CAPACITOR | 10µF,50V |
| | | C5323 | QETN1CM-107 | E CAPACITOR | 100µF,16V |
| | | C5324 | QFLC1HJ-102Z | F CAPACITOR | 0.001µF,50V |
| | | C5325 | QFLC1HJ-102Z | F CAPACITOR | 0.001µF,50V |
| | | C5326 | QETN1AM-107 | E CAPACITOR | 100µF,10V |
| | | C5329 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C5330 | QETN1AM-107 | E CAPACITOR | 100µF,10V |
| | | C5331 | QETN1AM-107 | E CAPACITOR | 100µF,10V |
| | | L5321 | QQL01BK-221Z | COIL | 220µH |
| | | HS1 | LP40090-001A | HEAT SINK,Q5321 | |
| | | OT1 | QYTDST3006Z | SCREW,Q5321 | |
| | | CN5301 | QGF1208C1-19 | FPC CONNECTOR,(1-19)SW/REG | |
| | | CN5321 | QGF1208F1-13 | FPC CONNECTOR,(1-13) | |
| | | CN5322 | QGF1208F1-11 | FPC CONNECTOR,(1-11) | |
| | | CN5323 | QGA2001C1-10 | CONNECTOR,(1-10)DV MAIN | |
| | | CN5324 | QGA2001C1-05 | CONNECTOR,(1-5)DV PRE/REC | |
| | | CN5325 | QGA2001F1-02 | CONNECTOR,(1-2)FAN MOTOR | |
| | ⚠ | CP5321 | ICP-N25 | CIRCUIT PROTECTOR | |
| | ⚠ | CP5322 | ICP-N25 | CIRCUIT PROTECTOR | |
| | ⚠ | CP5323 | ICP-N25 | CIRCUIT PROTECTOR | |

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## MAIN BOARD ASSEMBLY <03>

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION |
|---|---|---|---|---|
| | | PW1 | LPA10113-05A | MAIN BOARD ASSY |
| | | IC1 | JCP8022-NSD-2 | IC |
| | | IC702 | MM1113XF | IC |
| | | IC703 | MM1228XF | IC |
| | | IC705 | MM1117XF | IC |
| | | IC706 | PQ05TZ1U | IC |
| | | | or PQ05TZ5U | IC |
| | | IC707 | AN3916 | IC |
| | | IC712 | MM1111XF | IC |
| | | IC2601 | BU4052BCF | IC |
| | | IC2602 | BA15218F-XE | IC |
| | | IC2603 | BU4052BCF | IC |
| | | IC2605 | BA15218F-XE | IC |
| | | IC2606 | BU4052BCF | IC |
| | | IC2607 | BU4052BCF | IC |
| | | IC2608 | BA15218F-XE | IC |
| | | IC2609 | LA7151 | IC |
| | | IC2610 | BU4053BCF | IC |
| | | IC3001 | HD6432194B02F | IC(MCU) |
| | | IC3002 | S-80727AN-DQ-X | IC |
| | | | or S-80827ANUP-W | IC |
| | | IC3003 | AT24C08-10PC | IC |
| | | | or 24LC08B/P | IC |
| | | IC3004 | BA6956AN | IC |
| | | IC3301 | UPD780053GC042 | IC(MCU) |
| | | IC3302 | TC74HC4053AF | IC |
| | | Q1 | 2SC4081/S/-X | TRANSISTOR |
| | | Q2 | 2SC4081/S/-X | TRANSISTOR |
| | | Q3 | 2SC4081/S/-X | TRANSISTOR |
| | | Q4 | 2SC4081/S/-X | TRANSISTOR |
| | | Q5 | 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | Q7 | 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SC4081/QRS/-X | TRANSISTOR |
| | | Q8 | 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q9 | 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | | or 2SA1576A/QR/-X | TRANSISTOR |
| | | Q12 | 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | Q17 | DTC144WU | TRANSISTOR |
| | | | or PDTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q21 | 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | Q24 | 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | Q38 | 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q401 | 2SA1576A/QR/-X | TRANSISTOR |
| | | Q402 | 2SA1576A/QR/-X | TRANSISTOR |
| | | Q403 | DTC144WU | TRANSISTOR |
| | | | or PDTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q404 | DTC144WU | TRANSISTOR |
| | | | or PDTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q405 | 2SA1576A/QR/-X | TRANSISTOR |
| | | Q703 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | Q704 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q705 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | Q706 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q707 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | Q708 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | Q709 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION |
|---|---|---|---|---|
| | | Q710 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | Q711 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | Q712 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q713 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | Q714 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | Q725 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | Q729 | DTC144WU | TRANSISTOR |
| | | | or PDTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q730 | DTA144WU | TRANSISTOR |
| | | | or PDTA144WU | TRANSISTOR |
| | | | or RN2309 | TRANSISTOR |
| | | | or UN511E | TRANSISTOR |
| | | Q2001 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q2002 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | Q2003 | DTA144WU | TRANSISTOR |
| | | | or PDTA144WU | TRANSISTOR |
| | | | or RN2309 | TRANSISTOR |
| | | | or UN511E | TRANSISTOR |
| | | Q2004 | DTC144WU | TRANSISTOR |
| | | | or PDTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q2051 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q2052 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | Q2053 | DTC144WU | TRANSISTOR |
| | | | or PDTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q2054 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | Q2061 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | Q2062 | 2SA1576A/QR/-X | TRANSISTOR |
| | | | or 2SB1218A/QR/-X | TRANSISTOR |
| | | | or 2PA1576/R/-X | TRANSISTOR |
| | | Q2251 | DTA144WU | TRANSISTOR |
| | | | or PDTA144WU | TRANSISTOR |
| | | | or RN2309 | TRANSISTOR |
| | | | or UN511E | TRANSISTOR |
| | | Q2252 | DTC114EU | TRANSISTOR |
| | | | or PDTC114EU | TRANSISTOR |
| | | | or RN1302 | TRANSISTOR |
| | | | or UN5211 | TRANSISTOR |
| | | Q2601 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | Q2602 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q3001 | 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q3002 | PTZ-NV16 | PHOTO TRANSISTOR |
| | | | or PTZ-NV16A | PHOTO TRANSISTOR |
| | | Q3003 | PTZ-NV16 | PHOTO TRANSISTOR |
| | | | or PTZ-NV16A | PHOTO TRANSISTOR |
| | | Q3004 | 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | Q3005 | 2SD1819A/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SC4081/QRS/-X | TRANSISTOR |
| | | Q3009 | UN521E | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or DTC144WU | TRANSISTOR |
| | | | or PDTC144WU | TRANSISTOR |
| | | Q3010 | DTC144WU | TRANSISTOR |
| | | | or PDTC144WU | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | Q3011 | 2SC4081/QRS/-X | TRANSISTOR |
| | | | or 2PC4081/R/-X | TRANSISTOR |
| | | | or 2SD1819A/QRS/-X | TRANSISTOR |
| | | Q3302 | DTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q3303 | DTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q3304 | DTC144WU | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | Q3305 | DTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q3306 | DTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q3307 | DTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q3308 | DTC144WU | TRANSISTOR |
| | | | or RN1309 | TRANSISTOR |
| | | | or UN521E | TRANSISTOR |
| | | Q4001 | UN5211 | TRANSISTOR |
| | | | or RN1302 | TRANSISTOR |
| | | | or DTC114EU | TRANSISTOR |
| | | Q4003 | UN5211 | TRANSISTOR |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | | or DTC114EU | TRANSISTOR | |
| | | | or RN1302 | TRANSISTOR | |
| | | Q6040 | 2SC4081/RS/-X | TRANSISTOR | |
| | | Q6041 | 2SA1576A/QR/-X | TRANSISTOR | |
| | | | or 2PA1576/R/-X | TRANSISTOR | |
| | | Q6042 | DTC144EU | TRANSISTOR | |
| | | Q6501 | DTC143TU | TRANSISTOR | |
| | | Q6502 | DTC143TU | TRANSISTOR | |
| | | Q6551 | 2SC1740S/QRS/-T | TRANSISTOR | |
| | | | or KTC3199/YG/-T | TRANSISTOR | |
| | | | or 2SC3199/YG/-T | TRANSISTOR | |
| | | Q7501 | 2SC1317/RS/-T | TRANSISTOR | |
| | | Q7502 | DTC144WU | TRANSISTOR | |
| | | | or PDTC144WU | TRANSISTOR | |
| | | | or RN1309 | TRANSISTOR | |
| | | | or UN521E | TRANSISTOR | |
| | | D706 | 1SS355 | DIODE | |
| | | D2001 | 1SS355 | DIODE | |
| | | D2121 | MTZJ8.2C | ZENER DIODE | |
| | | D2201 | 11ES2 | DIODE | |
| | | D3001 | LNB2301L01VI | LE DIODE | |
| | | D3002 | 1SS133 | DIODE | |
| | | D3003 | RD33ES/B2/-T2 | ZENER DIODE | |
| | | | or MTZJ33C | ZENER DIODE | |
| | | D3004 | 11ES2 | DIODE | |
| | | | or 1A3G | DIODE | |
| | | D3005 | 11ES2 | DIODE | |
| | | | or 1A3G | DIODE | |
| | | D3007 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | D3011 | 1SS133 | DIODE | |
| | | D3012 | 1SS133 | DIODE | |
| | | D3301 | 1SS355 | DIODE | |
| | | D4001 | 1SS355 | DIODE | |
| | | D4002 | 1SS355 | DIODE | |
| | | D6002 | HZ30-2L-T2 | ZENER DIODE | |
| | | | or HZ30-2LTD | Z DIODE (M) | |
| | | D6040 | DA204U | DIODE | |
| | | D6551 | MTZJ10B | ZENER DIODE | |
| | | R1 | NRVA02D-622X | CMF RESISTOR | 6.2kΩ,1/10W |
| | | R2 | NRVA02D-152X | CMF RESISTOR | 1.5kΩ,1/10W |
| | | R3 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R5 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R6 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R7 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R8 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R9 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R21 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R22 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R23 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R25 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R26 | NRSA02J-822X | MG RESISTOR | 8.2kΩ,1/10W |
| | | R27 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R28 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R29 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R30 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R31 | NRSA02J-122X | MG RESISTOR | 1.2kΩ,1/10W |
| | | R32 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R34 | NRSA02J-223X | MG RESISTOR | 22kΩ,1/10W |
| | | R36 | NRSA02J-182X | MG RESISTOR | 1.8kΩ,1/10W |
| | | R39 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R42 | NRSA02J-681X | MG RESISTOR | 680Ω,1/10W |
| | | R44 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R45 | NRSA02J-153X | MG RESISTOR | 15kΩ,1/10W |
| | | R46 | NRSA02J-331X | MG RESISTOR | 330Ω,1/10W |
| | | R48 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R51 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R68 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R70 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R77 | NRSA02J-223X | MG RESISTOR | 22kΩ,1/10W |
| | | R88 | NRSA02J-272X | MG RESISTOR | 2.7kΩ,1/10W |
| | | R90 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R92 | NRSA02J-152X | MG RESISTOR | 1.5kΩ,1/10W |
| | | R93 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R104 | NRSA02J-682X | MG RESISTOR | 6.8kΩ,1/10W |
| | | R113 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R401 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R402 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R403 | NRSA02J-391X | MG RESISTOR | 390Ω,1/10W |
| | | R404 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R405 | NRSA02J-683X | MG RESISTOR | 68kΩ,1/10W |
| | | R407 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R408 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R409 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R704 | NRSA02J-333X | MG RESISTOR | 33kΩ,1/10W |
| | | R705 | NRSA02J-223X | MG RESISTOR | 22kΩ,1/10W |
| | | R706 | NRVA02D-271X | CMF RESISTOR | 270Ω,1/10W |
| | | R707 | NRVA02D-561X | CMF RESISTOR | 560Ω,1/10W |
| | | R709 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R710 | NRSA02J-561X | MG RESISTOR | 560Ω,1/10W |
| | | R711 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R712 | NRSA02J-682X | MG RESISTOR | 6.8kΩ,1/10W |
| | | R713 | NRSA02J-392X | MG RESISTOR | 3.9kΩ,1/10W |
| | | R714 | NRSA02J-681X | MG RESISTOR | 680Ω,1/10W |
| | | R716 | NRVA02D-132X | CMF RESISTOR | 1.3kΩ,1/10W |
| | | R717 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R718 | NRVA02D-271X | CMF RESISTOR | 270Ω,1/10W |
| | | R719 | NRVA02D-431X | CMF RESISTOR | 430Ω,1/10W |
| | | R720 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R721 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R722 | NRVA02D-471X | CMF RESISTOR | 470Ω,1/10W |
| | | R723 | NRVA02D-471X | CMF RESISTOR | 470Ω,1/10W |
| | | R724 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R725 | NRSA02J-105X | MG RESISTOR | 1MΩ,1/10W |
| | | R726 | NRSA02J-394X | MG RESISTOR | 390kΩ,1/10W |
| | | R727 | NRSA02J-105X | MG RESISTOR | 1MΩ,1/10W |
| | | R728 | NRVA02D-271X | CMF RESISTOR | 270Ω,1/10W |
| | | R729 | NRVA02D-271X | CMF RESISTOR | 270Ω,1/10W |
| | | R730 | NRSA02J-332X | MG RESISTOR | 3.3kΩ,1/10W |
| | | R767 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R768 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R769 | NRSA02J-122X | MG RESISTOR | 1.2kΩ,1/10W |
| | | R770 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R771 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R772 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R773 | NRSA02J-223X | MG RESISTOR | 22kΩ,1/10W |
| | | R774 | NRSA02J-274X | MG RESISTOR | 270kΩ,1/10W |
| | | R775 | NRSA02J-183X | MG RESISTOR | 18kΩ,1/10W |
| | | R777 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R785 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | VR701 | QVP0039-333Z | TRIM RESISTOR,DV AGC | |
| | | R2003 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R2004 | NRSA02J-332X | MG RESISTOR | 3.3kΩ,1/10W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R2005 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2006 | NRSA02J-393X | MG RESISTOR | 39kΩ,1/10W |
| | | R2007 | NRSA02J-393X | MG RESISTOR | 39kΩ,1/10W |
| | | R2009 | NRSA02J-123X | MG RESISTOR | 12kΩ,1/10W |
| | | R2010 | NRSA02J-123X | MG RESISTOR | 12kΩ,1/10W |
| | | R2011 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2012 | NRSA02J-153X | MG RESISTOR | 15kΩ,1/10W |
| | | R2013 | NRSA02J-682X | MG RESISTOR | 6.8kΩ,1/10W |
| | | R2014 | NRSA02J-224X | MG RESISTOR | 220kΩ,1/10W |
| | | R2015 | NRSA02J-181X | MG RESISTOR | 180Ω,1/10W |
| | | R2016 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R2017 | NRSA02J-123X | MG RESISTOR | 12kΩ,1/10W |
| | | R2018 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R2019 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R2020 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2024 | QRE141J-472 | RESISTOR | 4.7kΩ,1/4W |
| | | R2053 | NRSA02J-332X | MG RESISTOR | 3.3kΩ,1/10W |
| | | R2054 | NRSA02J-153X | MG RESISTOR | 15kΩ,1/10W |
| | | R2055 | NRSA02J-3R3X | MG RESISTOR | 3.3Ω,1/10W |
| | | R2056 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R2057 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R2058 | NRSA02J-183X | MG RESISTOR | 18kΩ,1/10W |
| | | R2059 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R2060 | NRSA02J-183X | MG RESISTOR | 18kΩ,1/10W |
| | | R2061 | NRSA02J-273X | MG RESISTOR | 27kΩ,1/10W |
| | | R2062 | NRSA02J-3R3X | MG RESISTOR | 3.3Ω,1/10W |
| | | R2063 | NRSA02J-151X | MG RESISTOR | 150Ω,1/10W |
| | | R2064 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R2065 | NRSA02J-183X | MG RESISTOR | 18kΩ,1/10W |
| | | R2121 | QRE141J-151Y | RESISTOR | 150Ω,1/4W |
| | | R2206 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R2207 | NRSA02J-332X | MG RESISTOR | 3.3kΩ,1/10W |
| | | R2213 | NRSA02J-393X | MG RESISTOR | 39kΩ,1/10W |
| | | R2215 | NRSA02J-153X | MG RESISTOR | 15kΩ,1/10W |
| | | R2217 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2218 | NRSA02J-393X | MG RESISTOR | 39kΩ,1/10W |
| | | R2219 | NRSA02J-393X | MG RESISTOR | 39kΩ,1/10W |
| | | R2220 | NRSA02J-393X | MG RESISTOR | 39kΩ,1/10W |
| | | R2223 | NRSA02J-123X | MG RESISTOR | 12kΩ,1/10W |
| | | R2224 | NRSA02J-123X | MG RESISTOR | 12kΩ,1/10W |
| | | R2225 | NRSA02J-153X | MG RESISTOR | 15kΩ,1/10W |
| | | R2228 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R2251 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2252 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R2601 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2602 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2603 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2604 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2605 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2606 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2607 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2608 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2609 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2610 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2611 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2613 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2614 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2616 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2617 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2618 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2623 | NRSA02J-223X | MG RESISTOR | 22kΩ,1/10W |
| | | R2624 | NRSA02J-562X | MG RESISTOR | 5.6kΩ,1/10W |
| | | R2625 | NRSA02J-562X | MG RESISTOR | 5.6kΩ,1/10W |
| | | R2626 | NRSA02J-223X | MG RESISTOR | 22kΩ,1/10W |
| | | R2627 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2628 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2629 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2630 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2631 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2632 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2633 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2634 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2635 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2636 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2637 | NRSA02J-105X | MG RESISTOR | 1MΩ,1/10W |
| | | R2638 | NRSA02J-105X | MG RESISTOR | 1MΩ,1/10W |
| | | R2651 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2652 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2653 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2654 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2655 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2656 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2657 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2658 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2659 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R2660 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R2661 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2662 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R2663 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2664 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R2665 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2666 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R2667 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2668 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2681 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R2682 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2683 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R2684 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2685 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R2686 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R2687 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R2688 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R2689 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R2691 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R2692 | NRSA02J-121X | MG RESISTOR | 120Ω,1/10W |
| | | R3011 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3012 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3013 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3016 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3017 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3018 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3021 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3022 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3025 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3026 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3027 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3029 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3030 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3031 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3033 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3034 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3038 | NRSA02J-152X | MG RESISTOR | 1.5kΩ,1/10W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R3040 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3041 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3042 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3044 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3046 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3047 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3048 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R3049 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3050 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3051 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R3052 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R3053 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R3054 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3055 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3056 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3057 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3058 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3059 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3060 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R3061 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R3062 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3063 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3066 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3069 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R3071 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3072 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3073 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3075 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R3076 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R3077 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3078 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3079 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3083 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3085 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3086 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3087 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3088 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3089 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3091 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3094 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3095 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3096 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3097 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3103 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3104 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3105 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3106 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3107 | NRSA02J-682X | MG RESISTOR | 6.8kΩ,1/10W |
| | | R3201 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3202 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3203 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3204 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R3205 | QRE141J-181Y | RESISTOR | 180Ω,1/4W |
| | | R3206 | NRSA02J-183X | MG RESISTOR | 18kΩ,1/10W |
| | | R3207 | NRSA02J-183X | MG RESISTOR | 18kΩ,1/10W |
| | | R3208 | NRSA02J-181X | MG RESISTOR | 180Ω,1/10W |
| | | R3209 | NRSA02J-273X | MG RESISTOR | 27kΩ,1/10W |
| | | R3210 | NRSA02J-181X | MG RESISTOR | 180Ω,1/10W |
| | | R3211 | NRSA02J-273X | MG RESISTOR | 27kΩ,1/10W |
| | | R3212 | NRSA02J-474X | MG RESISTOR | 470kΩ,1/10W |
| | | R3213 | NRSA02J-334X | MG RESISTOR | 330kΩ,1/10W |
| | | R3214 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3215 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3216 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3217 | NRSA02J-562X | MG RESISTOR | 5.6kΩ,1/10W |
| | | R3218 | QRE141J-472Y | RESISTOR | 4.7kΩ,1/4W |
| | | R3219 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3220 | NRSA02J-104X | MG RESISTOR | 100kΩ,1/10W |
| | | R3222 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3223 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3224 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3225 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3229 | NRSA02J-105X | MG RESISTOR | 1MΩ,1/10W |
| | | R3230 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3231 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3233 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3235 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3236 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3237 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3238 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3239 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3241 | NRSA02J-104X | MG RESISTOR | 100kΩ,1/10W |
| | | R3247 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3251 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3301 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3302 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3303 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3305 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3306 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3308 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3309 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3310 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3311 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3312 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3313 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3314 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3315 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3316 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3317 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3318 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3319 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3320 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3321 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R3322 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3323 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3324 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3325 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3326 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3327 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3328 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3329 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3330 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3331 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3332 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3334 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3335 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3336 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3337 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3338 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3339 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R3340 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3341 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R3342 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3343 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3344 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3346 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3347 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3348 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3349 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3350 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3351 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3352 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3353 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3354 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3355 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3357 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3358 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3360 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3361 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3362 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3363 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3364 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3365 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3366 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3369 | NRSA02J-105X | MG RESISTOR | 1MΩ,1/10W |
| | | R3371 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3376 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3377 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3378 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3379 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3380 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3401 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3402 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R3403 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3412 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R3417 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R3418 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R3419 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R3424 | NRSA02J-473X | MG RESISTOR | 47kΩ,1/10W |
| | | R3425 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R4001 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R4003 | NRSA02J-561X | MG RESISTOR | 560Ω,1/10W |
| | | R4004 | NRSA02J-561X | MG RESISTOR | 560Ω,1/10W |
| | | R4005 | NRSA02J-562X | MG RESISTOR | 5.6kΩ,1/10W |
| | | R4007 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R4008 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R4009 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R4010 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R4011 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R4012 | NRSA02J-222X | MG RESISTOR | 2.2kΩ,1/10W |
| | | R4013 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R4014 | NRSA02J-182X | MG RESISTOR | 1.8kΩ,1/10W |
| | | R4015 | NRSA02J-223X | MG RESISTOR | 22kΩ,1/10W |
| | | R4016 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R4017 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R4018 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R4019 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R4020 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R4021 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R6020 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R6021 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R6022 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R6031 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R6032 | NRSA02J-123X | MG RESISTOR | 12kΩ,1/10W |
| | | R6040 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R6041 | NRSA02J-184X | MG RESISTOR | 180kΩ,1/10W |
| | | R6042 | NRSA02J-272X | MG RESISTOR | 2.7kΩ,1/10W |
| | | R6043 | NRSA02J-223X | MG RESISTOR | 22kΩ,1/10W |
| | | R6044 | NRSA02J-822X | MG RESISTOR | 8.2kΩ,1/10W |
| | | R6045 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R6046 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R6508 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R6510 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R6551 | NRSA02J-271X | MG RESISTOR | 270Ω,1/10W |
| | | R6552 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R6553 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R6554 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R7505 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R7506 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R7507 | QRE121J-100Y | RESISTOR | 10Ω,1/2W |
| | | R7508 | NRSA02J-562X | MG RESISTOR | 5.6kΩ,1/10W |
| | | B3 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B8 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B18 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B37 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B38 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B42 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B49 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B701 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B707 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B718 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B722 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B724 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B726 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B727 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B729 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B731 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B732 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B733 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B738 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B741 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B2012 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B2101 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B3003 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B3015 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B3016 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B3026 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B3302 | QUY160-150Y | IM BUS WIRE | |
| | | B6001 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B6030 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B6034 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B6565 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7504 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7505 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7511 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7513 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7515 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7516 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7518 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7519 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | C1 | NCB21EK-103X | CAPACITOR | 0.01μF,25V |
| | | C2 | NCB21EK-103X | CAPACITOR | 0.01μF,25V |
| | | C3 | NCB21EK-103X | CAPACITOR | 0.01μF,25V |
| | | C4 | NCB21EK-103X | CAPACITOR | 0.01μF,25V |
| | | C5 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C6 | NCB11EK-104X | CAPACITOR | 0.1μF,25V |
| | | C7 | NCB21HK-102X | CAPACITOR | 0.001μF,50V |
| | | C8 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C9 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C10 | NDC21HG-151X | CAPACITOR | 150pF,50V |
| | | C11 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C12 | NDC21HJ-7R0X | CAPACITOR | 7pF,50V |
| | | C14 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C15 | NCB21EK-103X | CAPACITOR | 0.01μF,25V |
| | | C16 | NCB11EK-104X | CAPACITOR | 0.1μF,25V |
| | | C17 | QEKJ1HM-335 | E CAPACITOR | 3.3μF,50V |
| | | C18 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C19 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C20 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C21 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C22 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |
| | | C23 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C24 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C25 | NDC21HJ-4R0X | CAPACITOR | 4pF,50V |
| | | C26 | NCB21EK-103X | CAPACITOR | 0.01μF,25V |
| | | C27 | NCB21HK-223X | CAPACITOR | 0.022μF,50V |
| | | C28 | QEKJ1HM-335 | E CAPACITOR | 3.3μF,50V |
| | | C29 | NCB21HK-472X | CAPACITOR | 0.0047μF,50V |
| | | C30 | NCB21CK-474X | CAPACITOR | 0.47μF,16V |
| | | C31 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |
| | | C32 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C33 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C34 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C35 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C36 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C37 | NCB21AK-105X | CAPACITOR | 1μF,10V |
| | | C38 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |
| | | C39 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C40 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C54 | NDC21HJ-221X | CAPACITOR | 220pF,50V |
| | | C59 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C60 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |
| | | C61 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C63 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C64 | NDC21HJ-120X | CAPACITOR | 12pF,50V |
| | | C69 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C70 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C71 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C72 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C73 | NDC21HJ-120X | CAPACITOR | 12pF,50V |
| | | C74 | NDC21HJ-120X | CAPACITOR | 12pF,50V |
| | | C80 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C84 | NDC21HJ-220X | CAPACITOR | 22pF,50V |
| | | C94 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | C106 | NDC21HJ-560X | CAPACITOR | 56pF,50V |
| | | C108 | NDC21HJ-150X | CAPACITOR | 15pF,50V |
| | | C109 | NCB21CK-224X | CAPACITOR | 0.22μF,16V |
| | | C110 | NDC21HJ-331X | CAPACITOR | 330pF,50V |
| | | C401 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C402 | NCB21HK-223X | CAPACITOR | 0.022μF,50V |
| | | C403 | NDC21HJ-151X | CAPACITOR | 150pF,50V |
| | | C404 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C406 | NDC21HJ-681X | CAPACITOR | 680pF,50V |
| | | C407 | NDC21HJ-180X | CAPACITOR | 18pF,50V |
| | | C704 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C705 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C706 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |
| | | C707 | NRSA02J-153X | MG RESISTOR | 15kΩ,1/10W |
| | | C708 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C709 | QEKJ0JM-337 | E CAPACITOR | 330μF,6.3V |
| | | C711 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C712 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C713 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C714 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C715 | QEKJ1CM-226 | E CAPACITOR | 22μF,16V |
| | | C717 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C718 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C719 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C720 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C722 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C757 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C759 | QEPF1HM-225 | NP E CAPACITOR | 2.2μF,50V |
| | | C760 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C761 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C763 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C764 | QEKJ0JM-107 | E CAPACITOR | 100μF,6.3V |
| | | C765 | NCB21HK-332X | CAPACITOR | 0.0033μF,50V |
| | | C766 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C767 | NCB21HK-473X | CAPACITOR | 0.047μF,50V |
| | | C768 | QEKJ0JM-226 | E CAPACITOR | 22μF,6.3V |
| | | C769 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C770 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C771 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C772 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C773 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C791 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |
| | | C799 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |
| | | C801 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C802 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C803 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C2001 | QETJ1HM-475 | E CAPACITOR | 4.7μF,50V |
| | | C2002 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C2003 | QEKJ0JM-476 | E CAPACITOR | 47μF,6.3V |
| | | C2004 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C2005 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C2006 | NCB21HK-123X | CAPACITOR | 0.012μF,50V |
| | | C2007 | QEKJ1CM-226 | E CAPACITOR | 22μF,16V |
| | | C2008 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C2009 | NCB21HK-102X | CAPACITOR | 0.001μF,50V |
| | | C2010 | NCB21HK-222X | CAPACITOR | 0.0022μF,50V |
| | | C2011 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C2012 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C2051 | NCB21HK-331X | CAPACITOR | 330pF,50V |
| | | C2052 | QFLC1HJ-333Z | F CAPACITOR | 0.033μF,50V |
| | | C2053 | NCB21HK-472X | CAPACITOR | 0.0047μF,50V |
| | | C2054 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C2055 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C2061 | QFLC1HJ-333Z | F CAPACITOR | 0.033μF,50V |
| | | C2062 | NCB21HK-332X | CAPACITOR | 0.0033μF,50V |
| | | C2063 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C2064 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C2121 | QEKJ1CM-476 | E CAPACITOR | 47μF,16V |
| | | C2201 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C2202 | NCB21EK-333X | CAPACITOR | 0.033μF,25V |
| | | C2203 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C2204 | NCB21HK-102X | CAPACITOR | 0.001μF,50V |
| | | C2205 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C2207 | QEKJ1CM-476 | E CAPACITOR | 47µF,16V |
| | | C2208 | QETJ1HM-475 | E CAPACITOR | 4.7µF,50V |
| | | C2215 | QERF1EM-475 | E CAPACITOR | 4.7µF,25V |
| | | C2216 | QEKJ1HM-474 | E CAPACITOR | 0.47µF,50V |
| | | C2217 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2218 | QEKJ1HM-474 | E CAPACITOR | 0.47µF,50V |
| | | C2219 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2220 | QEKJ1EM-475 | E CAPACITOR | 4.7µF,25V |
| | | C2221 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C2222 | QEKJ1HM-474 | E CAPACITOR | 0.47µF,50V |
| | | C2223 | QEKJ1HM-474 | E CAPACITOR | 0.47µF,50V |
| | | C2224 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C2225 | QEKJ1EM-475 | E CAPACITOR | 4.7µF,25V |
| | | C2226 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2227 | NCB21CK-104X | CAPACITOR | 0.1µF,16V |
| | | C2229 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C2230 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C2231 | NCB21HK-222X | CAPACITOR | 0.0022µF,50V |
| | | C2251 | QEKJ1CM-476 | E CAPACITOR | 47µF,16V |
| | | C2252 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C2253 | NCB21CK-104X | CAPACITOR | 0.1µF,16V |
| | | C2254 | NCB21CK-104X | CAPACITOR | 0.1µF,16V |
| | | C2255 | NDC21HJ-181X | CAPACITOR | 180pF,50V |
| | | C2601 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2602 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C2603 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C2604 | QEKJ1CM-476 | E CAPACITOR | 47µF,16V |
| | | C2605 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2606 | QEKJ1HM-105 | E CAPACITOR | 1µF,50V |
| | | C2607 | QEKJ1HM-105 | E CAPACITOR | 1µF,50V |
| | | C2610 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C2611 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C2612 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2651 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2652 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2653 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C2654 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C2655 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2656 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2657 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2658 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2659 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2660 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2661 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2681 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C2682 | QEKJ1CM-476 | E CAPACITOR | 47µF,16V |
| | | C2683 | QEKJ1CM-476 | E CAPACITOR | 47µF,16V |
| | | C3001 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3002 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C3003 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C3004 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3008 | NCB21HK-102X | CAPACITOR | 0.001µF,50V |
| | | C3010 | QEZ0244-229 | EDL CAPACITOR | 0.0022F,5.5V |
| | | C3012 | QEKJ0JM-107 | E CAPACITOR | 100µF,6.3V |
| | | C3015 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3016 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3022 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3024 | NDC21HJ-120X | CAPACITOR | 12pF,50V |
| | | C3027 | QERF1CM-106 | E CAPACITOR | 10µF,16V |
| | | C3030 | QERF1CM-226 | E CAPACITOR | 22µF,16V |
| | | C3031 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3032 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3033 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3036 | NDC21HJ-180X | CAPACITOR | 18pF,50V |
| | | C3037 | NDC21HJ-120X | CAPACITOR | 12pF,50V |
| | | C3040 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C3041 | NDC21HJ-100X | CAPACITOR | 10pF,50V |
| | | C3042 | QETJ0JM-477 | E CAPACITOR | 470µF,6.3V |
| | | C3054 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C3310 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C3311 | QEKJ1HM-335 | E CAPACITOR | 3.3µF,50V |
| | | C3312 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C3313 | NCB21EK-473X | CAPACITOR | 0.047µF,25V |
| | | C4002 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C4003 | NCB21HK-102X | CAPACITOR | 0.001µF,50V |
| | | C4004 | QERF1CM-226 | E CAPACITOR | 22µF,16V |
| | | C4006 | QERF0JM-476 | E CAPACITOR | 47µF,6.3V |
| | | C4007 | NCB21HJ-102X | CAPACITOR | 0.001µF,50V |
| | | C4008 | NCB21AK-105X | CAPACITOR | 1µF,10V |
| | | C4009 | NCB21HK-563X | CAPACITOR | 0.056µF,50V |
| | | C4010 | NCB21EK-223X | CAPACITOR | 0.022µF,25V |
| | | C4011 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C4012 | NCB21EK-224X | CAPACITOR | 0.22µF,25V |
| | | C4013 | NCB21HK-563X | CAPACITOR | 0.056µF,50V |
| | | C4014 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C4015 | NCB21HJ-102X | CAPACITOR | 0.001µF,50V |
| | | C4017 | NCB21HK-222X | CAPACITOR | 0.0022µF,50V |
| | | C6040 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | C6042 | NDC21HJ-471X | CAPACITOR | 470pF,50V |
| | | C6043 | NCB21HK-223X | CAPACITOR | 0.022µF,50V |
| | | C6044 | QEKJ1HM-225 | E CAPACITOR | 2.2µF,50V |
| | | C7503 | QETJ0JM-477 | E CAPACITOR | 470µF,6.3V |
| | | C7515 | NCB21EK-104X | CAPACITOR | 0.1µF,25V |
| | | L1 | QQL29BJ-100Z | COIL | 10µH |
| | | L2 | QQL231J-101Y | COIL | 100µH |
| | | L3 | QQL29BJ-100Z | COIL | 10µH |
| | | L4 | QQL29BJ-100Z | COIL | 10µH |
| | | L5 | QQL29BJ-100Z | COIL | 10µH |
| | | L11 | QQLZ011-120Z | COIL | 12µH |
| | | L13 | QQL231J-101Y | COIL | 100µH |
| | | L15 | QQL29BJ-100Z | COIL | 10µH |
| | | L18 | QUY153-050Y | IM BUS WIRE | |
| | | L19 | QQL231J-100Y | COIL | 10µH |
| | | L20 | QUY153-050Y | IM BUS WIRE | |
| | | L24 | QQL231J-180Y | COIL | 18µH |
| | | L27 | QQL231J-151Y | COIL | 150µH |
| | | L28 | QQL231J-150Y | COIL | 15µH |
| | | L401 | QQL071J-150Y | COIL | 15µH |
| | | L402 | QUY153-050Y | IM BUS WIRE | |
| | | L701 | QQL29BJ-4R7Z | COIL | 4.7µH |
| | | L702 | QQL29BJ-4R7Z | COIL | 4.7µH |
| | | L714 | QQL29BJ-4R7Z | COIL | 4.7µH |
| | | L715 | QQL29BJ-4R7Z | COIL | 4.7µH |
| | | L2001 | QQL29BJ-100Z | COIL | 10µH |
| | | L2251 | QQL29BJ-100Z | COIL | 10µH |
| | | L2252 | QQL29BJ-151Z | COIL | 150µH |
| | | L3011 | QRE141J-0R0Y | RESISTOR | 0Ω,1/4W |
| | | L3012 | QRE141J-0R0Y | RESISTOR | 0Ω,1/4W |
| | | L3301 | QQL231J-100Y | COIL | 10µH |
| | | L6001 | QUY153-050Y | IM BUS WIRE | |
| | | L6005 | QUY153-050Y | IM BUS WIRE | |
| | | L7501 | QQL29BJ-101Z | COIL | 100µH |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | CF3301 | QAX0227-001Z | RESONATOR | |
| | | X2 | QAX0575-001 | CRYSTAL RESONATOR | |
| | | X3001 | QAX0444-001 | CRYSTAL RESONATOR | |
| | | X3002 | QAX0527-001 | CRYSTAL RESONATOR | |
| | | S3001 | QSW0602-004 | PUSH SWITCH,REC SAFETY | |
| | | S3002 | QSW0695-001 | PUSH SWITCH,S CASS SW | |
| | | K2001 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | K2002 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | K2251 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | K2252 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | K2253 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | PC3001 | GP3S123 | IC(PHOTO SENSOR | |
| | | PC3002 | GP3S123 | IC(PHOTO SENSOR | |
| | | T2051 | PELN0860 | OSC TRANSFORMER | |
| | | T2052 | PELN0861 | OSC TRANSFORMER | |
| | | T6040 | PELN0806 | LC TRAP | |
| | | TU6001 | QAU0163-001 | TUNER | |
| | | SD1 | LP30644-001A | SHIELD CASE(PRE) | |
| | | WR100 | QUQ112-1414CG | FFC WIRE,S-SUB | |
| | | CN1 | QGF1028C1-13 | FPC CONNECTOR,(1-13)U.DRUM | |
| | | CN703 | QGA2001C1-06 | CONNECTOR,(1-6)DV MAIN | |
| | | CN2001 | QGF1207C1-07 | FPC CONNECTOR,(1-7)A/C HEAD | |
| | | CN2002 | QGB2532J1-02 | CONNECTOR,(1-2)FE HEAD | |
| | | CN2601 | QGF1016C3-08 | FFC/FPC CONNECTOR,(1-8)DV AUDIO | |
| | | CN3001 | QGF1207C1-05 | FPC CONNECTOR,(1-5)DRUM MDA | |
| | | CN3002 | QGB2532J1-02 | CONNECTOR,(1-2)LOADING MOTOR | |
| | | CN3003 | QGB2015M2-08 | CONNECTOR,(1-8)CAPSTAN MOTOR | |
| | | CN3004 | QGB2534J2-04 | CONNECTOR,(1-4)ROTARY ENCODER | |
| | | CN3011 | QGF1209F2-18 | FFC/FPC CONNECTOR,(1-18)SW/DISPLAY | |
| | | CN3014 | QGF1016C3-06 | FFC/FPC CONNECTOR,(1-6)DV MAIN | |
| | | CN7501 | QGB2024K1-13S | CONNECTOR,(1-13)TERMINAL | |
| | | CN7502 | QGB2024K1-07S | CONNECTOR,(1-7)TERMINAL | |
| | | CN7503 | QGB2024K1-10S | CONNECTOR,(1-10)TERMINAL | |
| | | CN7504 | QGB2024K1-11S | CONNECTOR,(1-11)TERMINAL | |
| | | CN7506 | QGF1207C1-14 | FPC CONNECTOR,(1-14)S-SUB | |
| | | CN7507 | QGF1209F2-16 | FFC/FPC CONNECTOR,(1-16)JOG | |
| | | CN7508 | QGF1207C1-11 | FPC CONNECTOR,(3-13)REG | |
| | | CN7509 | QGF1207C1-13 | FPC CONNECTOR,(3-15)REG | |
| | ⚠ | CP3002 | ICP-N15 | CIRCUIT PROTECTOR | |
| | ⚠ | CP3003 | ICP-N25 | CIRCUIT PROTECTOR | |
| | ⚠ | CP3004 | ICP-N15 | CIRCUIT PROTECTOR | |
| | ⚠ | CP4001 | ICP-N25 | CIRCUIT PROTECTOR | |

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## 3D DIGITAL/4M BOARD ASSEMBLY <05>

| | | | |
|---|---|---|---|
| | PW1 | LPA10104-03B | 3D DIGITAL/4M BOARD ASSY |
| | IC1401 | JCP8026 | IC |
| | IC1402 | MN47V77S-XE | IC |
| | Q1401 | 2SC1317/RS/-T | TRANSISTOR |
| | Q1402 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q1403 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q1406 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q1407 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q1408 | 2SC4081/S/-X | TRANSISTOR |
| | Q1410 | 2SC4081/QRS/-X | TRANSISTOR |
| | | or 2PC4081/R/-X | TRANSISTOR |
| | Q1412 | 2SC4081/QRS/-X | TRANSISTOR |
| | | or 2PC4081/R/-X | TRANSISTOR |
| | Q1413 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q1417 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q1418 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q1419 | DTC124TU | TRANSISTOR |
| | D1401 | RD4.3ES/B2/-T2 | ZENER DIODE |
| | | or MTZJ4.3B | ZENER DIODE |
| | D1402 | RB721Q-40-T2 | SB DIODE |
| | R1401 | NRSA02J-271X | MG RESISTOR 270Ω,1/10W |
| | R1402 | NRSA02J-101X | MG RESISTOR 100Ω,1/10W |
| | R1404 | NRSA02J-182X | MG RESISTOR 1.8kΩ,1/10W |
| | R1406 | NRSA02J-471X | MG RESISTOR 470Ω,1/10W |
| | R1407 | NRSA02J-272X | MG RESISTOR 2.7kΩ,1/10W |
| | R1410 | NRSA02J-241X | MG RESISTOR 240Ω,1/10W |
| | R1411 | NRSA02J-152X | MG RESISTOR 1.5kΩ,1/10W |
| | R1413 | NRSA02J-471X | MG RESISTOR 470Ω,1/10W |
| | R1414 | NRSA02J-821X | MG RESISTOR 820Ω,1/10W |
| | R1415 | NRSA02J-221X | MG RESISTOR 220Ω,1/10W |
| | R1416 | NRSA02J-104X | MG RESISTOR 100kΩ,1/10W |
| | R1417 | NRSA02J-101X | MG RESISTOR 100Ω,1/10W |
| | R1418 | NRSA02J-471X | MG RESISTOR 470Ω,1/10W |
| | R1421 | NRSA02J-331X | MG RESISTOR 330Ω,1/10W |
| | R1426 | NRSA02J-821X | MG RESISTOR 820Ω,1/10W |
| | R1427 | NRSA02J-333X | MG RESISTOR 33kΩ,1/10W |
| | R1428 | NRSA02J-393X | MG RESISTOR 39kΩ,1/10W |
| | R1429 | NRSA02J-152X | MG RESISTOR 1.5kΩ,1/10W |
| | R1430 | NRSA02J-222X | MG RESISTOR 2.2kΩ,1/10W |
| | R1431 | NRSA02J-821X | MG RESISTOR 820Ω,1/10W |
| | R1432 | NRSA02J-182X | MG RESISTOR 1.8kΩ,1/10W |
| | R1433 | NRSA02J-510X | MG RESISTOR 51Ω,1/10W |
| | R1434 | NRSA02J-153X | MG RESISTOR 15kΩ,1/10W |
| | R1435 | NRSA02J-103X | MG RESISTOR 10kΩ,1/10W |
| | R1436 | NRSA02J-392X | MG RESISTOR 3.9kΩ,1/10W |
| | R1437 | NRSA02J-392X | MG RESISTOR 3.9kΩ,1/10W |
| | R1438 | NRSA02J-473X | MG RESISTOR 47kΩ,1/10W |
| | R1439 | NRSA02J-273X | MG RESISTOR 27kΩ,1/10W |
| | R1440 | NRSA02J-473X | MG RESISTOR 47kΩ,1/10W |
| | R1446 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | R1447 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | R1448 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | R1449 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | R1450 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | R1452 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | R1453 | NRSA02J-102X | MG RESISTOR 1kΩ,1/10W |
| | R1455 | NRSA02J-681X | MG RESISTOR 680Ω,1/10W |
| | R1458 | NRSA02J-561X | MG RESISTOR 560Ω,1/10W |
| | R1459 | NRSA02J-681X | MG RESISTOR 680Ω,1/10W |
| | R1460 | NRSA02J-273X | MG RESISTOR 27kΩ,1/10W |
| | R1462 | NRSA02J-0R0X | MG RESISTOR 0Ω,1/10W |
| | VR1401 | QVZ3521-103Z | V RESISTOR,D/A LEVEL ADJ. |
| | B1417 | NRSA02J-0R0X | MG RESISTOR 0Ω,1/10W |
| | B1419 | NRSA02J-0R0X | MG RESISTOR 0Ω,1/10W |
| | C1401 | QEKJ1CM-336 | E CAPACITOR 33μF,16V |
| | C1402 | NCB21HK-103X | CAPACITOR 0.01μF,50V |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C1403 | QEKJ0JM-337 | E CAPACITOR | 330µF,6.3V |
| | | C1404 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1405 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1406 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C1407 | NDC21HJ-680X | CAPACITOR | 68pF,50V |
| | | C1408 | NDC21HJ-330X | CAPACITOR | 33pF,50V |
| | | C1410 | QEKJ1EM-475 | E CAPACITOR | 4.7µF,25V |
| | | C1411 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1412 | NDC21HJ-680X | CAPACITOR | 68pF,50V |
| | | C1413 | NDC21HJ-330X | CAPACITOR | 33pF,50V |
| | | C1415 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1416 | QEKJ1CM-106 | E CAPACITOR | 10µF,16V |
| | | C1417 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1421 | NDC21HJ-330X | CAPACITOR | 33pF,50V |
| | | C1422 | NDC21HJ-680X | CAPACITOR | 68pF,50V |
| | | C1423 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1424 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C1425 | NCB21HK-103X | CAPACITOR | 0.01µF,50V |
| | | C1426 | NDC21HJ-390X | CAPACITOR | 39pF,50V |
| | | C1428 | NDC21HJ-220X | CAPACITOR | 22pF,50V |
| | | C1429 | QEKJ0JM-337 | E CAPACITOR | 330µF,6.3V |
| | | C1430 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1432 | NCF21CZ-105X | CAPACITOR | 1µF,16V |
| | | C1433 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1435 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1436 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1437 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1438 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1439 | NCF21CZ-105X | CAPACITOR | 1µF,16V |
| | | C1440 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1441 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1442 | NCF21CZ-105X | CAPACITOR | 1µF,16V |
| | | C1444 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1445 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1446 | QEKJ0JM-107 | E CAPACITOR | 100µF,6.3V |
| | | C1447 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1448 | QEKJ0JM-337 | E CAPACITOR | 330µF,6.3V |
| | | C1449 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1451 | QEKJ1EM-475 | E CAPACITOR | 4.7µF,25V |
| | | C1452 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1453 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1454 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1455 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1456 | QEKJ0JM-337 | E CAPACITOR | 330µF,6.3V |
| | | C1457 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1458 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1459 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C1460 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C1461 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C1462 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C1463 | QEKJ0JM-336 | E CAPACITOR | 33µF,6.3V |
| | | C1465 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C1466 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C1467 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C1468 | NDC21HJ-470X | CAPACITOR | 47pF,50V |
| | | C1471 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1472 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | C1473 | NCF21EZ-104X | CAPACITOR | 0.1µF,25V |
| | | L1401 | QQL29BJ-100Z | COIL | 10µH |
| | | L1402 | QQL071J-6R8Y | COIL | 6.8µH |
| | | L1403 | QQL071J-6R8Y | COIL | 6.8µH |
| | | L1404 | QQL071J-6R8Y | COIL | 6.8µH |
| | | L1405 | QQL29BJ-101Z | COIL | 100µH |
| | | L1406 | QQL071J-330Y | COIL | 33µH |
| | | L1407 | QQL29BJ-101Z | COIL | 100µH |
| | | L1408 | QQL29BJ-101Z | COIL | 100µH |
| | | LC1401 | QQR0657-013Z | NOISE FILTER | |
| | | LC1402 | QQR0657-010Z | NOISE FILTER | |
| | | SD1 | LP30706-001C | SHIELD FRAME(S-VHS) | |
| | | SD2 | LP30684-001A | SHIELD CASE(S-VHS) | |
| | | CN1401 | QGG2502K1-17 | HEADER PIN | |

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## TERMINAL BOARD ASSEMBLY <06>

| | | | |
|---|---|---|---|
| | PW1 | LPA10115-03A | TERMINAL BOARD ASSY |
| | IC7101 | MM1228XF | IC |
| | IC7102 | MM1224XF | IC |
| | IC7103 | MM1512XN | IC |
| | IC7106 | MM1024AF | IC |
| | Q7101 | 2SC4081/QRS/-X | TRANSISTOR |
| | | or 2PC4081/R/-X | TRANSISTOR |
| | Q7102 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q7103 | 2SC4081/QRS/-X | TRANSISTOR |
| | | or 2PC4081/R/-X | TRANSISTOR |
| | Q7104 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q7105 | 2SC4226/4/-X | TRANSISTOR |
| | | or 2SC3938/QR/-X | TRANSISTOR |
| | Q7106 | 2SC4226/4/-X | TRANSISTOR |
| | | or 2SC3938/QR/-X | TRANSISTOR |
| | Q7107 | 2SC4226/4/-X | TRANSISTOR |
| | | or 2SC3938/QR/-X | TRANSISTOR |
| | Q7108 | 2SC4226/4/-X | TRANSISTOR |
| | | or 2SC3938/QR/-X | TRANSISTOR |
| | Q7109 | DTC144WU | TRANSISTOR |
| | | or PDTC144WU | TRANSISTOR |
| | Q7110 | DTC144WU | TRANSISTOR |
| | | or PDTC144WU | TRANSISTOR |
| | Q7111 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q7114 | 2SC4081/QRS/-X | TRANSISTOR |
| | | or 2PC4081/R/-X | TRANSISTOR |
| | Q7115 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | Q7116 | 2SC4081/QRS/-X | TRANSISTOR |
| | | or 2PC4081/R/-X | TRANSISTOR |
| | Q7117 | 2SA1576A/QR/-X | TRANSISTOR |
| | | or 2PA1576/R/-X | TRANSISTOR |
| | D7101 | DA204U | DIODE |
| | D7103 | DA204U | DIODE |
| | D7104 | DA204U | DIODE |
| | R7101 | NRSA02J-750X | MG RESISTOR 75Ω,1/10W |
| | R7102 | NRSA02J-750X | MG RESISTOR 75Ω,1/10W |
| | R7103 | NRVA02D-750X | CMF RESISTOR 75Ω,1/10W |
| | R7104 | NRVA02D-750X | CMF RESISTOR 75Ω,1/10W |
| | R7105 | NRVA02D-680X | CMF RESISTOR 68Ω,1/10W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R7106 | NRVA02D-750X | CMF RESISTOR | 75Ω,1/10W |
| | | R7107 | NRSA02J-750X | MG RESISTOR | 75Ω,1/10W |
| | | R7108 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R7109 | NRVA02D-750X | CMF RESISTOR | 75Ω,1/10W |
| | | R7110 | NRVA02D-680X | CMF RESISTOR | 68Ω,1/10W |
| | | R7111 | NRVA02D-561X | CMF RESISTOR | 560Ω,1/10W |
| | | R7112 | NRVA02D-561X | CMF RESISTOR | 560Ω,1/10W |
| | | R7113 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R7114 | NRVA02D-511X | CMF RESISTOR | 510Ω,1/10W |
| | | R7115 | NRVA02D-561X | CMF RESISTOR | 560Ω,1/10W |
| | | R7116 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R7117 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R7118 | NRSA02J-821X | MG RESISTOR | 820Ω,1/10W |
| | | R7119 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R7120 | NRSA02J-392X | MG RESISTOR | 3.9kΩ,1/10W |
| | | R7121 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R7122 | NRSA02J-152X | MG RESISTOR | 1.5kΩ,1/10W |
| | | R7123 | NRSA02J-271X | MG RESISTOR | 270Ω,1/10W |
| | | R7124 | NRSA02J-152X | MG RESISTOR | 1.5kΩ,1/10W |
| | | R7125 | NRSA02J-392X | MG RESISTOR | 3.9kΩ,1/10W |
| | | R7126 | NRSA02J-562X | MG RESISTOR | 5.6kΩ,1/10W |
| | | R7127 | NRSA02J-152X | MG RESISTOR | 1.5kΩ,1/10W |
| | | R7128 | NRSA02J-271X | MG RESISTOR | 270Ω,1/10W |
| | | R7129 | NRSA02J-152X | MG RESISTOR | 1.5kΩ,1/10W |
| | | R7130 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R7139 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R7140 | NRVA02D-561X | CMF RESISTOR | 560Ω,1/10W |
| | | R7141 | NRVA02D-471X | CMF RESISTOR | 470Ω,1/10W |
| | | R7142 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| | | R7143 | NRVA02D-561X | CMF RESISTOR | 560Ω,1/10W |
| | | R7144 | NRVA02D-471X | CMF RESISTOR | 470Ω,1/10W |
| | | R7145 | NRSA02J-271X | MG RESISTOR | 270Ω,1/10W |
| | | R7158 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R7159 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R7160 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R7161 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R7162 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R7163 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R7164 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R7182 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7103 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7104 | NRSA02J-3R3X | MG RESISTOR | 3.3Ω,1/10W |
| | | B7114 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7115 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B7116 | QUY153-050Y | IM BUS WIRE | |
| | | B7117 | QUY153-050Y | IM BUS WIRE | |
| | | C7101 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | C7102 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C7103 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C7104 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C7105 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C7106 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C7107 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C7108 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C7109 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C7110 | QEKJ1CM-476 | E CAPACITOR | 47μF,16V |
| | | C7111 | QEKJ0JM-107 | E CAPACITOR | 100μF,6.3V |
| | | C7112 | QEKJ0JM-226 | E CAPACITOR | 22μF,6.3V |
| | | C7113 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C7114 | QEKJ1HM-474 | E CAPACITOR | 0.47μF,50V |
| | | C7115 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C7116 | QEKJ1CM-476 | E CAPACITOR | 47μF,16V |
| | | C7117 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C7119 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C7120 | QEKJ0JM-107 | E CAPACITOR | 100μF,6.3V |
| | | C7121 | QEKJ0JM-337 | E CAPACITOR | 330μF,6.3V |
| | | C7122 | QEKJ0JM-337 | E CAPACITOR | 330μF,6.3V |
| | | C7123 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C7124 | QEKJ0JM-337 | E CAPACITOR | 330μF,6.3V |
| | | C7125 | QEKJ0JM-337 | E CAPACITOR | 330μF,6.3V |
| | | C7128 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C7137 | NDC21HJ-270X | CAPACITOR | 27pF,50V |
| | | C7138 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C7139 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C7141 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C7142 | QEKJ0JM-107 | E CAPACITOR | 100μF,6.3V |
| | | C7145 | QEPF1HM-474 | NP E CAPACITOR | 0.47μF,50V |
| | | C7146 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C7147 | QEKJ0JM-107 | E CAPACITOR | 100μF,6.3V |
| | | L7101 | QQL29BJ-4R7Z | COIL | 4.7μH |
| | | L7102 | QQL29BJ-4R7Z | COIL | 4.7μH |
| | | L7103 | QQL29BJ-4R7Z | COIL | 4.7μH |
| | | L7104 | QQL29BJ-4R7Z | COIL | 4.7μH |
| | | ET1 | QNZ0431-001Z | EARTH TERMINAL | |
| | | J7101 | QND0084-001 | S JACK,S_IN | |
| | | J7102 | QND0009-001 | S JACK,S1_OUT | |
| | | J7103 | QND0009-001 | S JACK,S2_OUT | |
| | | J7104 | QNN0358-001 | PIN JACK,R1_IN | |
| | | J7105 | QNN0363-004 | PIN JACK,R1_OUT | |
| | | J7106 | QNN0359-001 | PIN JACK,R2_OUT | |
| | | J7110 | PU60659 | MINI JACK,C.BOX | |
| | | CN7101 | QGB2024J1-13S | CONNECTOR,(1-13)MAIN | |
| | | CN7102 | QGB2024J1-07S | CONNECTOR,(1-7)MAIN | |
| | | CN7103 | QGB2024J1-10S | CONNECTOR,(2-11)MAIN | |
| | | CN7104 | QGB2024J1-11S | CONNECTOR,(1-11)MAIN | |

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## A/C HEAD BOARD ASSEMBLY <12>

| | | | |
|---|---|---|---|
| | PW1 | LPA10010-01A1 | A/C HEAD BOARD ASSY |
| | CN1 | QGF1208F1-07 | FPC CONNECTOR |

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## DEMOD BOARD ASSEMBLY <14>

| | | | |
|---|---|---|---|
| | PW1 | PB11076A | DEMOD BOARD ASSY |
| | IC1501 | UPC1852AGT | IC |
| | | or UPC1854AGT | IC |
| | R1501 | QRE141J-102Y | RESISTOR 1kΩ,1/4W |
| | R1502 | QRE141J-334Y | RESISTOR 330kΩ,1/4W |
| | R1503 | QRE141J-124Y | RESISTOR 120kΩ,1/4W |
| | R1504 | QRE141J-302Y | RESISTOR 3kΩ,1/4W |
| | R1505 | QRE141J-512Y | RESISTOR 5.1kΩ,1/4W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R1506 | QRE141J-333Y | RESISTOR | 33kΩ,1/4W |
| | | R1507 | QRE141J-333Y | RESISTOR | 33kΩ,1/4W |
| | | R1508 | QRE141J-392Y | RESISTOR | 3.9kΩ,1/4W |
| | | R1509 | QRE141J-122Y | RESISTOR | 1.2kΩ,1/4W |
| | | R1510 | QRE141J-392Y | RESISTOR | 3.9kΩ,1/4W |
| | | R1511 | QRE141J-122Y | RESISTOR | 1.2kΩ,1/4W |
| | | R1517 | QRE141J-123Y | RESISTOR | 12kΩ,1/4W |
| | | C1501 | QETN1CM-226 | E CAPACITOR | 22μF,16V |
| | | C1502 | QETN1HM-104 | E CAPACITOR | 0.1μF,50V |
| | | C1503 | QETN1HM-105 | E CAPACITOR | 1μF,50V |
| | | C1504 | QETN1HM-475 | E CAPACITOR | 4.7μF,50V |
| | | C1505 | QETN1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C1506 | QETN1HM-104 | E CAPACITOR | 0.1μF,50V |
| | | C1507 | QFV11HJ-473 | F CAPACITOR | 0.047μF,50V |
| | | C1508 | QETN1HM-474 | E CAPACITOR | 0.47μF,50V |
| | | C1509 | QETN1HM-104 | E CAPACITOR | 0.1μF,50V |
| | | C1510 | QETN1HM-105 | E CAPACITOR | 1μF,50V |
| | | C1511 | QETN1HM-105 | E CAPACITOR | 1μF,50V |
| | | C1512 | QETN1HM-105 | E CAPACITOR | 1μF,50V |
| | | C1513 | QETN1HM-335 | T CAPACITOR | 3.3μF,50V |
| | | C1514 | QETN1HM-106 | T CAPACITOR | 10μF,50V |
| | | C1515 | QETN1HM-105 | E CAPACITOR | 1μF,50V |
| | | C1516 | QETN1HM-106 | E CAPACITOR | 10μF,50V |
| | | C1517 | QETN1HM-106 | E CAPACITOR | 10μF,50V |
| | | C1518 | QETN1HM-105 | E CAPACITOR | 1μF,50V |
| | | C1521 | QETN1HM-106 | E CAPACITOR | 10μF,50V |
| | | BK1 | LP40077-001A | BRACKET(BOARD) | |
| | | CN1501 | QGG2502K1-09 | HEADER PIN | |

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## S-SUB BOARD ASSEMBLY <15>

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | PW1 | LPA10103-04A | S-SUB BOARD ASSY | |
| | | IC501 | JCP8038 | IC | |
| | | IC502 | VC2076DP | IC | |
| | | R503 | NRSA02J-221X | MG RESISTOR | 220Ω,1/10W |
| | | R504 | NRSA02J-332X | MG RESISTOR | 3.3kΩ,1/10W |
| | | R505 | NRSA02J-392X | MG RESISTOR | 3.9kΩ,1/10W |
| | | R506 | NRSA02J-391X | MG RESISTOR | 390Ω,1/10W |
| | | R507 | NRSA02J-122X | MG RESISTOR | 1.2kΩ,1/10W |
| | | R508 | NRSA02J-151X | MG RESISTOR | 150Ω,1/10W |
| | | R509 | NRSA02J-162X | MG RESISTOR | 1.6kΩ,1/10W |
| | | R510 | NRVA02D-102X | CMF RESISTOR | 1kΩ,1/10W |
| | | R511 | NRVA02D-471X | CMF RESISTOR | 470Ω,1/10W |
| | | R512 | NRVA02D-102X | CMF RESISTOR | 1kΩ,1/10W |
| | | R513 | NRVA02D-152X | CMF RESISTOR | 1.5kΩ,1/10W |
| | | R514 | NRVA02D-332X | CMF RESISTOR | 3.3kΩ,1/10W |
| | | R515 | NRVA02D-332X | CMF RESISTOR | 3.3kΩ,1/10W |
| | | R516 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R517 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R522 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R523 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R524 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R525 | NRSA02J-125X | MG RESISTOR | 1.2MΩ,1/10W |
| | | R527 | NRSA02J-332X | MG RESISTOR | 3.3kΩ,1/10W |
| | | R531 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R532 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R533 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R534 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R535 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | R536 | NRSA02J-101X | MG RESISTOR | 100Ω,1/10W |
| | | B501 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B503 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | C501 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C502 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C503 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C504 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C505 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C506 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C507 | QEKJ0JM-227 | E CAPACITOR | 220μF,6.3V |
| | | C508 | QEPF1HM-474 | NP E CAPACITOR | 0.47μF,50V |
| | | C509 | QEKJ1CM-106 | E CAPACITOR | 10μF,16V |
| | | C510 | QEKJ0JM-227 | E CAPACITOR | 220μF,6.3V |
| | | C511 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C512 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C513 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C514 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C515 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C516 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C517 | NCF21EZ-104X | CAPACITOR | 0.1μF,25V |
| | | C518 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C519 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C520 | QERF1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C521 | QEKJ1EM-475 | E CAPACITOR | 4.7μF,25V |
| | | C522 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C523 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C524 | NDC21HG-301X | CAPACITOR | 300pF,50V |
| | | C525 | NDC21HG-301X | CAPACITOR | 300pF,50V |
| | | C526 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C527 | NDC21HJ-181X | CAPACITOR | 180pF,50V |
| | | C528 | NDC21HG-271X | CAPACITOR | 270pF,50V |
| | | C529 | NDC21HG-820X | CAPACITOR | 82pF,50V |
| | | C530 | NDC21HG-221X | CAPACITOR | 220pF,50V |
| | | C531 | NDC21HG-301X | CAPACITOR | 300pF,50V |
| | | C532 | NDC21HG-301X | CAPACITOR | 300pF,50V |
| | | C533 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C534 | QETJ0JM-477 | E CAPACITOR | 470μF,6.3V |
| | | C535 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C551 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C552 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C553 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C554 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C555 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C556 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C557 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C558 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C559 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C560 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C561 | QEKJ1HM-105 | E CAPACITOR | 1μF,50V |
| | | C563 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | L501 | QQL29BJ-100Z | COIL | 10μH |
| | | L503 | QQL29BJ-100Z | COIL | 10μH |
| | | L504 | QQL29BJ-100Z | COIL | 10μH |
| | | BK1 | LP40077-001A | BRACKET(BOARD) | |
| | | CN511 | QGG2503K2-30 | HEADER PIN,(1-30)MAIN | |
| | | CN512 | QGF1209F2-14 | FFC/FPC CONNE,(1-14)MAIN | |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| ********** | | | | | |

## DV PRE/REC MDA BOARD ASSEMBLY <16>

| | | | |
|---|---|---|---|
| | | PW2 | LPA10117-01C2 | DV PRE/REC MDA BOARD ASSY | |
| | | IC5001 | JCY0132 | IC | |
| | | IC5002 | TC7SH00FU | IC(DIGITAL) | |
| | | IC5501 | BA6865KV | IC | |
| | | IC5502 | BA6417F | IC | |
| | | Q5501 | DTA114EU | TRANSISTOR | |
| | | Q5502 | 2SB1302/ST/-X | TRANSISTOR | |
| | | Q5503 | 2SB1302/ST/-X | TRANSISTOR | |
| | | Q5504 | 2SB1302/ST/-X | TRANSISTOR | |
| | | Q5505 | 2SC4097/QR/-X | TRANSISTOR | |
| | | D5502 | DAP222 | DIODE | |
| | | D5503 | DAP222 | DIODE | |
| | | D5504 | DAP222 | DIODE | |
| | | R5003 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5004 | NRSA63J-471X | MG RESISTOR | 470Ω,1/16W |
| | | R5007 | NRSA63J-104X | MG RESISTOR | 100kΩ,1/16W |
| | | R5014 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R5018 | NRSA63J-241X | MG RESISTOR | 240Ω,1/16W |
| | | R5019 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5020 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5021 | NRSA63J-241X | MG RESISTOR | 240Ω,1/16W |
| | | R5023 | NRSA63J-241X | MG RESISTOR | 240Ω,1/16W |
| | | R5026 | NRSA63J-241X | MG RESISTOR | 240Ω,1/16W |
| | | R5035 | NRSA63J-223X | MG RESISTOR | 22kΩ,1/16W |
| | | R5057 | NRSA63J-223X | MG RESISTOR | 22kΩ,1/16W |
| | | R5058 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R5101 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5102 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5111 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5112 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5114 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5115 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5117 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5118 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5119 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5121 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5501 | NRSA63J-681X | MG RESISTOR | 680Ω,1/16W |
| | | R5502 | NRSA63J-124X | MG RESISTOR | 120kΩ,1/16W |
| | | R5503 | NRSA63J-472X | MG RESISTOR | 4.7kΩ,1/16W |
| | | R5504 | NRSA63J-104X | MG RESISTOR | 100kΩ,1/16W |
| | | R5505 | NRSA63J-223X | MG RESISTOR | 22kΩ,1/16W |
| | | R5506 | NRV142F-R22X | CMF RESISTOR | 0.22Ω,1/4W |
| | | R5509 | NRS12BK-R68W | MG RESISTOR | 0.68Ω,1/2W |
| | | R5510 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R5511 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R5512 | NRSA63J-274X | MG RESISTOR | 270kΩ,1/16W |
| | | R5513 | NRSA63J-272X | MG RESISTOR | 2.7kΩ,1/16W |
| | | R5514 | NRSA63J-154X | MG RESISTOR | 150kΩ,1/16W |
| | | R5515 | NRSA63J-474X | MG RESISTOR | 470kΩ,1/16W |
| | | R5516 | NRSA63J-202X | MG RESISTOR | 2kΩ,1/16W |
| | | R5517 | NRSA63J-473X | MG RESISTOR | 47kΩ,1/16W |
| | | R5518 | NRSA63J-203X | MG RESISTOR | 20kΩ,1/16W |
| | | R5519 | NRSA63J-393X | MG RESISTOR | 39kΩ,1/16W |
| | | R5520 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R5522 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R5523 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R5525 | NRSA63J-511X | MG RESISTOR | 510Ω,1/16W |
| | | R5526 | NRSA63J-511X | MG RESISTOR | 510Ω,1/16W |
| | | R5527 | NRSA63J-511X | MG RESISTOR | 510Ω,1/16W |
| | | R5528 | NRSA63J-511X | MG RESISTOR | 510Ω,1/16W |
| | | R5529 | NRSA63J-105X | MG RESISTOR | 1MΩ,1/16W |
| | | R5530 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5531 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5533 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5534 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5536 | NRSA63J-823X | MG RESISTOR | 82kΩ,1/16W |
| | | R5537 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R5543 | NRSA63J-333X | MG RESISTOR | 33kΩ,1/16W |
| | | R5544 | NRSA63J-333X | MG RESISTOR | 33kΩ,1/16W |
| | | R5545 | NRSA63J-333X | MG RESISTOR | 33kΩ,1/16W |
| | | R5546 | NRSA63J-393X | MG RESISTOR | 39kΩ,1/16W |
| | | R5547 | NRSA02J-1R8X | MG RESISTOR | 1.8Ω,1/10W |
| | | R5548 | NRSA63J-333X | MG RESISTOR | 33kΩ,1/16W |
| | | R5549 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R5550 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R5551 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5552 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5553 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5554 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5555 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5556 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5557 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5558 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5559 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5560 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R5561 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | C5002 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5003 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5004 | NCB31CK-223X | CAPACITOR | 0.022μF,16V |
| | | C5005 | NCB31CK-473X | CAPACITOR | 0.047μF,16V |
| | | C5006 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5007 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5008 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5009 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C5010 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5011 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5012 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C5034 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5035 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5036 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5037 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C5039 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5045 | NCB31CK-473X | CAPACITOR | 0.047μF,16V |
| | | C5046 | NCB31CK-473X | CAPACITOR | 0.047μF,16V |
| | | C5047 | NCB31CK-473X | CAPACITOR | 0.047μF,16V |
| | | C5048 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C5049 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5050 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5051 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5052 | NDC31HJ-102X | CAPACITOR | 0.001μF,50V |
| | | C5053 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5055 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5056 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5058 | NCB20JM-475X | CAPACITOR | 4.7μF,6.3V |
| | | C5060 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5062 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C5063 | NCB20JM-475X | CAPACITOR | 4.7μF,6.3V |
| | | C5064 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C5065 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5066 | NEA70JM-226X | E CAPACITOR | 22µF,6.3V |
| | | C5101 | QCBB1HJ-151 | CAPACITOR | 150pF,50V |
| | | C5501 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5502 | NEA71CM-106X | E CAPACITOR | 10µF,16V |
| | | C5503 | NBE21AM-106X | T CAPACITOR | 10µF,10V |
| | | C5505 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5506 | NCB31HK-152X | CAPACITOR | 0.0015µF,50V |
| | | C5507 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5508 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5509 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5510 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5511 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5512 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5513 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5514 | NEA71CM-106X | E CAPACITOR | 10µF,16V |
| | | C5515 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5516 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5517 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5518 | NCB31EK-223X | CAPACITOR | 0.022µF,25V |
| | | C5519 | NCB31EK-223X | CAPACITOR | 0.022µF,25V |
| | | C5520 | NCB31EK-223X | CAPACITOR | 0.022µF,25V |
| | | C5521 | NCF21CZ-105X | CAPACITOR | 1µF,16V |
| | | C5522 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5523 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5525 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5526 | NCB31EK-223X | CAPACITOR | 0.022µF,25V |
| | | C5527 | NCB31CK-473X | CAPACITOR | 0.047µF,16V |
| | | C5528 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5531 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5532 | NEA70JM-226X | E CAPACITOR | 22µF,6.3V |
| | | C5535 | NEA71CM-106X | E CAPACITOR | 10µF,16V |
| | | C5536 | NEA71CM-106X | E CAPACITOR | 10µF,16V |
| | | C5537 | NEA70JM-226X | E CAPACITOR | 22µF,6.3V |
| | | C5539 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5540 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5541 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5544 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5546 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5547 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C5548 | NCF21CZ-224X | CAPACITOR | 0.22µF,16V |
| | | C5549 | NCF21CZ-224X | CAPACITOR | 0.22µF,16V |
| | | C5550 | NCF21CZ-224X | CAPACITOR | 0.22µF,16V |
| | | C5551 | NCB31EK-103X | CAPACITOR | 0.01µF,25V |
| | | C5552 | NEA71CM-106X | E CAPACITOR | 10µF,16V |
| | | L5001 | NQL144K-100X | COIL | 10µH |
| | | L5002 | NQL144K-100X | COIL | 10µH |
| | | L5003 | NQL144K-100X | COIL | 10µH |
| | | L5004 | NQL144K-100X | COIL | 10µH |
| | | L5005 | NQL144K-100X | COIL | 10µH |
| | | L5501 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | LC5501 | PELN1148-223X | NOISE FILTER | |
| | | LC5502 | PELN1148-223X | NOISE FILTER | |
| | | LC5503 | PELN1148-223X | NOISE FILTER | |
| | | LC5505 | PELN1148-223X | NOISE FILTER | |
| | | SD1 | LP30467-001A | SHIELD COVER | |
| | | QA5501 | BA6254FS | TR ARRAY | |
| | | CN5001 | QGF0501F1-10X | FPC CONNECTOR,(1-10)DV VIDEO | |
| | | CN5002 | QGF0503F2-26X | FFC/FPC CONNECTOR,(1-26)DV MAIN | |
| | | CN5501 | QGA2001F2-05V | CONNECTOR,(1-5)REG | |
| | | CN5502 | QGA1201C2-02X | CONNECTOR,(1-2)LOADING MOTOR | |
| | | CN5503 | QGF0504C1-11X | FPC CONNECTOR,(1-11)DV DRUM MOTOR | |
| | | CN5504 | QGF0501F1-18X | FPC CONNECTOR,(1-18)DV CAPSTAN | |
| | | CN5505 | QGA1201C2-04X | CONNECTOR,(1-4)DV ENCODER | |
| | | CN5506 | QGF0503F2-20X | FFC/FPC CONNECTOR,(1-20)DV MAIN | |
| | | CN5507 | QGA1201C2-04X | CONNECTOR,(1-4)DV HOUSING MOTOR | |

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## ON SCREEN BOARD ASSEMBLY <17>

| REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|
| PW1 | LPA10127-04A | ON SCREEN BOARD ASSY | |
| IC851 | LC74785N-9762 | IC (OSD) | |
| IC852 | MM1115XF | IC | |
| Q853 | 2SA1576A/QR/-X | TRANSISTOR | |
| | or 2SB1218A/QR/-X | TRANSISTOR | |
| | or 2PA1576/R/-X | TRANSISTOR | |
| Q854 | 2SC4081/QRS/-X | TRANSISTOR | |
| | or 2PC4081/R/-X | TRANSISTOR | |
| | or 2SD1819A/QRS/-X | TRANSISTOR | |
| Q855 | 2SC4081/QRS/-X | TRANSISTOR | |
| | or 2SD1819A/QRS/-X | TRANSISTOR | |
| | or 2PC4081/R/-X | TRANSISTOR | |
| Q857 | 2SA1576A/QR/-X | TRANSISTOR | |
| | or 2SB1218A/QR/-X | TRANSISTOR | |
| | or 2PA1576/R/-X | TRANSISTOR | |
| Q858 | 2SC4081/QRS/-X | TRANSISTOR | |
| | or 2PC4081/R/-X | TRANSISTOR | |
| | or 2SD1819A/QRS/-X | TRANSISTOR | |
| Q859 | 2SA1576A/QR/-X | TRANSISTOR | |
| | or 2SB1218A/QR/-X | TRANSISTOR | |
| | or 2PA1576/R/-X | TRANSISTOR | |
| Q860 | DTC114EU | TRANSISTOR | |
| | or PDTC114EU | TRANSISTOR | |
| | or RN1302 | TRANSISTOR | |
| | or UN5211 | TRANSISTOR | |
| D851 | 1SS133 | DIODE | |
| | or 1N4148M | DIODE | |
| D852 | 1SS133 | DIODE | |
| | or 1N4148M | DIODE | |
| D853 | 1SS133 | DIODE | |
| | or 1N4148M | DIODE | |
| D854 | 1SS133 | DIODE | |
| | or 1N4148M | DIODE | |
| D855 | DA204U | DIODE | |
| R851 | QRE141J-102Y | RESISTOR | 1kΩ,1/4W |
| R852 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| R854 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| R855 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| R856 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| R857 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| R860 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| R861 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| R862 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| R863 | NRSA02J-102X | MG RESISTOR | 1kΩ,1/10W |
| R864 | NRSA02J-182X | MG RESISTOR | 1.8kΩ,1/10W |
| R865 | NRSA02J-681X | MG RESISTOR | 680Ω,1/10W |
| R866 | NRSA02J-681X | MG RESISTOR | 680Ω,1/10W |
| R867 | NRSA02J-182X | MG RESISTOR | 1.8kΩ,1/10W |
| R872 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| R873 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R874 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R879 | NRSA02J-332X | MG RESISTOR | 3.3kΩ,1/10W |
| | | R880 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | R881 | NRSA02J-471X | MG RESISTOR | 470Ω,1/10W |
| | | R882 | NRSA02J-184X | MG RESISTOR | 180kΩ,1/10W |
| | | R883 | NRSA02J-822X | MG RESISTOR | 8.2kΩ,1/10W |
| | | R884 | NRSA02J-272X | MG RESISTOR | 2.7kΩ,1/10W |
| | | R885 | NRSA02J-153X | MG RESISTOR | 15kΩ,1/10W |
| | | R886 | NRSA02J-681X | MG RESISTOR | 680Ω,1/10W |
| | | R887 | NRSA02J-103X | MG RESISTOR | 10kΩ,1/10W |
| | | R888 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R889 | NRSA02J-472X | MG RESISTOR | 4.7kΩ,1/10W |
| | | R891 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B852 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B854 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B855 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B860 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B861 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | B862 | NRSA02J-0R0X | MG RESISTOR | 0Ω,1/10W |
| | | C851 | QEKJ0JM-337 | E CAPACITOR | 330μF,6.3V |
| | | C852 | NCB21EK-224X | CAPACITOR | 0.22μF,25V |
| | | C853 | NCB21CK-105X | CAPACITOR | 1μF,16V |
| | | C854 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C856 | NCB21CK-105X | CAPACITOR | 1μF,16V |
| | | C859 | NDC21HJ-680X | CAPACITOR | 68pF,50V |
| | | C860 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C861 | NDC21HJ-150X | CAPACITOR | 15pF,50V |
| | | C862 | NDC21HJ-820X | CAPACITOR | 82pF,50V |
| | | C863 | NDC21HJ-101X | CAPACITOR | 100pF,50V |
| | | C865 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C867 | NDC21HJ-330X | CAPACITOR | 33pF,50V |
| | | C868 | NDC21HJ-330X | CAPACITOR | 33pF,50V |
| | | C874 | NCB21EK-224X | CAPACITOR | 0.22μF,25V |
| | | C877 | QEKJ1CM-476 | E CAPACITOR | 47μF,16V |
| | | C878 | NCB21HK-103X | CAPACITOR | 0.01μF,50V |
| | | C879 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C881 | NCB21HK-471X | CAPACITOR | 470pF,50V |
| | | C882 | NCB21HK-223X | CAPACITOR | 0.022μF,50V |
| | | C883 | QEKJ1HM-225 | E CAPACITOR | 2.2μF,50V |
| | | C884 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C885 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | C886 | NCB21EK-104X | CAPACITOR | 0.1μF,25V |
| | | L851 | QQL01BK-1R0Z | COIL | 1μH |
| | | L855 | QQL071J-220Y | COIL | 22μH |
| | | L856 | QQL071J-151Y | COIL | 150μH |
| | | L857 | QUY153-050Y | IM BUS WIRE | |
| | | L858 | QQL37CJ-220Z | COIL | 22μH |
| | | L859 | QQL29BJ-4R7Z | COIL | 4.7μH |
| | | T851 | PELN0806 | LC TRAP | |
| | | BK1 | LP40077-001A | BRACKET(BOARD) | |
| | | CN851 | QGG2502K1-20 | HEADER PIN | |

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## EJECT SW BOARD ASSEMBLY <27>

| | | | |
|---|---|---|---|
| | PW5 | LPA10126-01C5 | EJECT SW BOARD ASSY |
| | S7011 | QSW0456-002Z | TACT SWITCH,VHS EJECT |
| | FW7005 | QUM022-15A4A4 | PARA RIBON WIRE |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|

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## SW/DISPLAY BOARD ASSEMBLY <28>

| | | | | |
|---|---|---|---|---|
| | | PW1 | LPA10126-01C1 | SW/DISPLAY BOARD ASSY |
| | | IC7001 | M35500BGP | IC |
| | | | or M35500AGP | IC |
| | | | or M35500BFP | IC |
| | | IC7002 | PNA4652M00XB | IR DETECT UNIT |
| | | | or GP1U281X | IR DETECT UNIT |
| | | D7002 | RD9.1ES/B2/-T2 | ZENER DIODE |
| | | | or UZ9.1BSB | ZENER DIODE |
| | | | or MTZJ9.1B | ZENER DIODE |
| | | D7004 | 1SS133 | DIODE |
| | | | or 1N4148M | DIODE |
| | | D7005 | 1SS133 | DIODE |
| | | | or 1N4148M | DIODE |
| | | D7006 | 1SS133 | DIODE |
| | | | or 1N4148M | DIODE |
| | | D7009 | SLR-342DU3F | LE DIODE |
| | | D7010 | SLR-342MG3F | LE DIODE |
| | | D7011 | SLR-342VR3F | LE DIODE |
| | | D7013 | SLR-342MG3F | LE DIODE |
| | | D7014 | SLR-342VR3F | LE DIODE |
| | | D7015 | SLR-342MG3F | LE DIODE |
| | | D7016 | SLR-342MG3F | LE DIODE |
| | | R7001 | QRE141J-471Y | RESISTOR | 470Ω,1/4W |
| | | R7002 | QRE141J-471Y | RESISTOR | 470Ω,1/4W |
| | | R7003 | QRE141J-471Y | RESISTOR | 470Ω,1/4W |
| | | R7004 | QRE141J-471Y | RESISTOR | 470Ω,1/4W |
| | | R7006 | QRE141J-103Y | RESISTOR | 10kΩ,1/4W |
| | | R7007 | QRE141J-103Y | RESISTOR | 10kΩ,1/4W |
| | | R7008 | QRE141J-103Y | RESISTOR | 10kΩ,1/4W |
| | | R7013 | QRE141J-103Y | RESISTOR | 10kΩ,1/4W |
| | | R7014 | QUY153-050Y | IM BUS WIRE | |
| | | R7015 | QUY153-050Y | IM BUS WIRE | |
| | | R7020 | QRE141J-103Y | RESISTOR | 10kΩ,1/4W |
| | | R7021 | QRE141J-122Y | RESISTOR | 1.2kΩ,1/4W |
| | | R7022 | QRE141J-182Y | RESISTOR | 1.8kΩ,1/4W |
| | | R7023 | QRE141J-222Y | RESISTOR | 2.2kΩ,1/4W |
| | | R7024 | QRE141J-272Y | RESISTOR | 2.7kΩ,1/4W |
| | | R7025 | QRE141J-472Y | RESISTOR | 4.7kΩ,1/4W |
| | | R7026 | QRE141J-682Y | RESISTOR | 6.8kΩ,1/4W |
| | | R7027 | QRE141J-153Y | RESISTOR | 15kΩ,1/4W |
| | | R7028 | QRE141J-393Y | RESISTOR | 39kΩ,1/4W |
| | | R7030 | QRE141J-103Y | RESISTOR | 10kΩ,1/4W |
| | | R7031 | QRE141J-122Y | RESISTOR | 1.2kΩ,1/4W |
| | | R7032 | QRE141J-182Y | RESISTOR | 1.8kΩ,1/4W |
| | | R7033 | QRE141J-222Y | RESISTOR | 2.2kΩ,1/4W |
| | | R7034 | QRE141J-272Y | RESISTOR | 2.7kΩ,1/4W |
| | | R7035 | QRE141J-472Y | RESISTOR | 4.7kΩ,1/4W |
| | | R7036 | QRE141J-682Y | RESISTOR | 6.8kΩ,1/4W |
| | | R7037 | QRE141J-153Y | RESISTOR | 15kΩ,1/4W |
| | | R7038 | QRE141J-393Y | RESISTOR | 39kΩ,1/4W |
| | | R7040 | QRE141J-103Y | RESISTOR | 10kΩ,1/4W |
| | | R7041 | QRE141J-122Y | RESISTOR | 1.2kΩ,1/4W |
| | | R7042 | QRE141J-182Y | RESISTOR | 1.8kΩ,1/4W |
| | | R7051 | QRE141J-331Y | RESISTOR | 330Ω,1/4W |
| | | R7052 | QRE141J-331Y | RESISTOR | 330Ω,1/4W |
| | | R7053 | QRE141J-331Y | RESISTOR | 330Ω,1/4W |
| | | R7054 | QRE141J-331Y | RESISTOR | 330Ω,1/4W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R7055 | QRE141J-331Y | RESISTOR | 330Ω,1/4W |
| | | R7057 | QRE141J-331Y | RESISTOR | 330Ω,1/4W |
| | | R7058 | QRE141J-331Y | RESISTOR | 330Ω,1/4W |
| | | R7059 | QRE141J-331Y | RESISTOR | 330Ω,1/4W |
| | | C7001 | QCFB1HZ-104 | CAPACITOR | 0.1µF,50V |
| | | C7002 | QETN1HM-106 | E CAPACITOR | 10µF,50V |
| | | C7007 | QEKC0JM-476 | E CAPACITOR | 47µF,6.3V |
| | | C7009 | QCSB1HJ-150 | CAPACITOR | 15pF,50V |
| | | C7010 | QCFB1HZ-104 | CAPACITOR | 0.1µF,50V |
| | | C7011 | QEKC1AM-227 | E CAPACITOR | 220µF,10V |
| | | C7019 | QDVB1EZ-223Y | CAPACITOR | 0.022µF,25V |
| | | L7001 | QUY153-050Y | IM BUS WIRE | |
| | | S7001 | QSW0456-002Z | TACT SWITCH,POWER | |
| | | S7002 | QSW0456-002Z | TACT SWITCH,CH+ | |
| | | S7003 | QSW0456-002Z | TACT SWITCH,CH- | |
| | | S7004 | QSW0456-002Z | TACT SWITCH,REC | |
| | | S7005 | QSW0456-002Z | TACT SWITCH,PAUSE | |
| | | S7006 | QSW0456-002Z | TACT SWITCH,PLAY | |
| | | S7007 | QSW0456-002Z | TACT SWITCH,STOP | |
| | | S7012 | QSW0456-002Z | TACT SWITCH,S-VHS ET | |
| | | S7013 | QSW0456-002Z | TACT SWITCH,VHS | |
| | | S7014 | QSW0456-002Z | TACT SWITCH,DV EJECT | |
| | | S7015 | QSW0456-002Z | TACT SWITCH,RAE/REW | |
| | | S7016 | QSW0456-002Z | TACT SWITCH,INSERT | |
| | | S7017 | QSW0456-002Z | TACT SWITCH,A.DUB | |
| | | S7018 | QSW0456-002Z | TACT SWITCH,IN/OUT | |
| | | S7019 | QSW0456-002Z | TACT SWITCH,START | |
| | | S7021 | QSW0456-002Z | TACT SWITCH,DV-VHS | |
| | | S7022 | QSW0456-002Z | TACT SWITCH,VHS-DV | |
| | | S7023 | QSW0456-002Z | TACT SWITCH,DUB | |
| | | DI7001 | QLF0031-002 | FL TUBE | |
| | | HD1 | PQ34949 | FDP HOLDER(L),DI7001 | |
| | | HD2 | PQ34950 | FDP HOLDER(R),DI7001 | |
| | | HD3 | PQ40795-2-2 | LED HOLDER,D7009 | |
| | | HD4 | PQM30038-1-2 | LED HOLDER,D7010 | |
| | | HD5 | PQM30038-1-2 | LED HOLDER,D7011 | |
| | | HD6 | PQM30038-1-2 | LED HOLDER,D7013 | |
| | | HD7 | PQM30038-1-2 | LED HOLDER,D7014 | |
| | | HD8 | PQM30038-1-2 | LED HOLDER,D7015 | |
| | | HD9 | PQM30038-1-2 | LED HOLDER,D7016 | |
| | | CN7001 | QGF1207F1-18 | FPC CONNECTOR,(1-18)MAIN | |

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## JACK BOARD ASSEMBLY <36>

| | | | |
|---|---|---|---|
| PW2 | LPA10126-01C2 | JACK BOARD ASSY | |
| D7063 | 1SS133 | DIODE | |
| | or 1N4148M | DIODE | |
| D7064 | 1SS133 | DIODE | |
| | or 1N4148M | DIODE | |
| D7065 | 1SS133 | DIODE | |
| | or 1N4148M | DIODE | |
| D7066 | 1SS133 | DIODE | |
| | or 1N4148M | DIODE | |
| R7061 | QRE141J-750Y | RESISTOR | 75Ω,1/4W |
| R7063 | QRE141J-750Y | RESISTOR | 75Ω,1/4W |
| R7064 | QRE141J-750Y | RESISTOR | 75Ω,1/4W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C7061 | QDYB1CM-103Y | CAPACITOR | 0.01µF,16V |
| | | C7062 | QCBB1HJ-681 | CAPACITOR | 680pF,50V |
| | | C7064 | QCBB1HJ-681 | CAPACITOR | 680pF,50V |
| | | L7061 | QQL071J-100Y | COIL | 10µH |
| | | L7062 | QQL071J-100Y | COIL | 10µH |
| | | J7001 | QND0085-001 | S JACK,S VIDEO | |
| | | J7002 | PEMC1126-04 | PIN JACK,V IN | |
| | | J7003 | PEMC0922-02 | PIN JACK(SW),R IN | |
| | | J7004 | PEMC0922-03 | PIN JACK(SW),L IN | |
| | | J7005 | PU60659 | MINI JACK,R.PAUSE | |
| | | WR7001 | QUB220-16A4XL | SIN TWIST WIRE | |
| | | CN7002 | QGF1207F1-16 | FPC CONNECTOR,(1-16)VHS MAIN | |

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## LED/SW BOARD ASSEMBLY <47>

| | | |
|---|---|---|
| PW3 | LPA10126-01C3 | LED/SW BOARD ASSY |
| D7012 | SLR-342DU3F | LE DIODE |
| S7010 | QSW0456-001Z | TACT SWITCH |
| FW7003 | QUM034-04A4A4 | PARA RIBON WIRE |

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## DV MAIN BOARD ASSEMBLY <50>

| | | |
|---|---|---|
| PW1 | LPA10117-04A1 | DV MAIN BOARD ASSY |
| IC1001 | MN1021617FN | IC(MCU) |
| IC1002 | TC7W04FU | IC(DIGITAL) |
| IC1005 | S-80823ANNP-W | IC |
| IC1006 | RS5C314 | IC |
| IC1007 | 25LC160-I/SN-X | IC |
| | or X25170S8I-2.5-X | IC |
| IC1008 | TC7W08F | IC |
| IC1009 | MM1426CN | IC |
| IC1501 | MN103004KFE | IC(MCU) |
| IC1502 | TC7W14FK | IC |
| IC2001 | JCY0133 | IC |
| IC2002 | JCY0136 | IC |
| IC2003 | MM1385NN | IC |
| IC2004 | MM1385JN | IC |
| IC2007 | TLC2940IPW | IC |
| IC3001 | JCP8029 | IC |
| IC3101 | TC7SH04F | IC(DIGITAL) |
| IC3102 | TC7SH04F | IC(DIGITAL) |
| IC3151 | M62366GP | IC |
| IC3501 | NJM2538V | IC |
| IC3502 | MM1385HN | IC |
| IC3701 | AK4518-VF-X | IC |
| | or PCM3006 | IC |
| IC3702 | BA15218F-XE | IC |
| IC3703 | BA15218F-XE | IC |
| Q1001 | 2SC4617/RS/-X | TRANSISTOR |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | Q1002 | 2SC4617/RS/-X | TRANSISTOR | |
| | | Q1011 | 2SB1302/ST/-X | TRANSISTOR | |
| | | Q1012 | DTC144EE | TRANSISTOR | |
| | | Q1013 | 2SB1302/ST/-X | TRANSISTOR | |
| | | Q1014 | DTC144EE | TRANSISTOR | |
| | | Q1015 | 2SB1302/ST/-X | TRANSISTOR | |
| | | Q1016 | DTC144EE | TRANSISTOR | |
| | | Q1017 | 2SB1302/ST/-X | TRANSISTOR | |
| | | Q1018 | DTC144EE | TRANSISTOR | |
| | | Q1501 | DTA114EE | TRANSISTOR | |
| | | Q1602 | UMC3N | TRANSISTOR | |
| | | Q1603 | UMC3N | TRANSISTOR | |
| | | Q3101 | 2SA1576A/RS/-X | TRANSISTOR | |
| | | Q3102 | 2SA1576A/RS/-X | TRANSISTOR | |
| | | Q3111 | 2SA1576A/RS/-X | TRANSISTOR | |
| | | Q3112 | HN1B04FU/YG/-X | PAIR TRANSISTOR | |
| | | Q3113 | 2SC4081/RS/-X | TRANSISTOR | |
| | | Q3114 | 2SC4081/S/-X | TRANSISTOR | |
| | | Q3115 | DTC144EE | TRANSISTOR | |
| | | Q3131 | 2SA1576A/RS/-X | TRANSISTOR | |
| | | Q3132 | HN1B04FU/YG/-X | PAIR TRANSISTOR | |
| | | Q3133 | 2SC4081/RS/-X | TRANSISTOR | |
| | | Q3501 | DTC144EE | TRANSISTOR | |
| | | Q3502 | 2SA1576A/RS/-X | TRANSISTOR | |
| | | Q3503 | 2SA1576A/RS/-X | TRANSISTOR | |
| | | D1001 | SB007W03Q | SB DIODE | |
| | | D1002 | SB007W03Q | SB DIODE | |
| | | D1101 | 1SS133 | DIODE | |
| | | D1501 | SB007W03Q | SB DIODE | |
| | | D2002 | EC2C01C | VARI CAP DIODE | |
| | | D2003 | EC2C01C | VARI CAP DIODE | |
| | | D2004 | EC2C01C | VARI CAP DIODE | |
| | | R1002 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1025 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1027 | NRSA63J-104X | MG RESISTOR | 100kΩ,1/16W |
| | | R1028 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1029 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1030 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1031 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1032 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1033 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1035 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1037 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1038 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1041 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1043 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1045 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1046 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1047 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1048 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1049 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1050 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1051 | NRSA63J-223X | MG RESISTOR | 22kΩ,1/16W |
| | | R1052 | NRSA63J-333X | MG RESISTOR | 33kΩ,1/16W |
| | | R1053 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1061 | NRSA63J-472X | MG RESISTOR | 4.7kΩ,1/16W |
| | | R1062 | NRSA63J-472X | MG RESISTOR | 4.7kΩ,1/16W |
| | | R1063 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1064 | NRSA63J-472X | MG RESISTOR | 4.7kΩ,1/16W |
| | | R1065 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1081 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1082 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1083 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R1084 | NRSA63J-104X | MG RESISTOR | 100kΩ,1/16W |
| | | R1085 | NRSA63J-104X | MG RESISTOR | 100kΩ,1/16W |
| | | R1091 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1092 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1093 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1094 | NRSA63J-271X | MG RESISTOR | 270Ω,1/16W |
| | | R1095 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1096 | NRSA63J-271X | MG RESISTOR | 270Ω,1/16W |
| | | R1098 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1099 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1100 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1103 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1105 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1106 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1107 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1114 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1117 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1118 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1119 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1120 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1125 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1126 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1501 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1502 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1503 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1504 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1505 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1506 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1514 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1515 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1516 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1517 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1518 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1519 | NRSA63J-472X | MG RESISTOR | 4.7kΩ,1/16W |
| | | R1520 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1521 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R1522 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R1523 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1524 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1525 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1526 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1527 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1528 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1535 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R1536 | NRSA63J-202X | MG RESISTOR | 2kΩ,1/16W |
| | | R1537 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R1538 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R1539 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R1540 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1546 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1547 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1552 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1553 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1558 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1560 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1562 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1563 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1564 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1565 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R1566 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R1567 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R1568 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R1569 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1575 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1576 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1577 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1578 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1579 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1580 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1581 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1587 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1591 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1592 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1593 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R1601 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1602 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1603 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1605 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1606 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1607 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1608 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1609 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1611 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1612 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1613 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1614 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1615 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1616 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1617 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1618 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1619 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1631 | NRSA63J-331X | MG RESISTOR | 330Ω,1/16W |
| | | R1636 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1641 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1642 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1644 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1645 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1646 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1647 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1648 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1649 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1650 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1651 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1653 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1655 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R1661 | NRSA63J-101X | MG RESISTOR | 100Ω,1/16W |
| | | R1663 | NRSA63J-330X | MG RESISTOR | 33Ω,1/16W |
| | | R1665 | NRSA63J-683X | MG RESISTOR | 68kΩ,1/16W |
| | | R1666 | NRSA63J-683X | MG RESISTOR | 68kΩ,1/16W |
| | | R1667 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R1668 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2010 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2011 | NRSA63J-151X | MG RESISTOR | 150Ω,1/16W |
| | | R2012 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R2013 | NRSA63J-151X | MG RESISTOR | 150Ω,1/16W |
| | | R2014 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R2015 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2016 | NRSA63J-105X | MG RESISTOR | 1MΩ,1/16W |
| | | R2017 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2018 | NRSA63J-562X | MG RESISTOR | 5.6kΩ,1/16W |
| | | R2019 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R2020 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2021 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2022 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R2023 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R2027 | NRSA63J-224X | MG RESISTOR | 220kΩ,1/16W |
| | | R2033 | NRSA63J-242X | MG RESISTOR | 2.4kΩ,1/16W |
| | | R2034 | NRSA63J-392X | MG RESISTOR | 3.9kΩ,1/16W |
| | | R2035 | NRSA63J-392X | MG RESISTOR | 3.9kΩ,1/16W |
| | | R2036 | NRSA63J-560X | MG RESISTOR | 56Ω,1/16W |
| | | R2037 | NRSA63J-560X | MG RESISTOR | 56Ω,1/16W |
| | | R2038 | NRSA63J-560X | MG RESISTOR | 56Ω,1/16W |
| | | R2039 | NRSA63J-560X | MG RESISTOR | 56Ω,1/16W |
| | | R2040 | NRSA63J-512X | MG RESISTOR | 5.1kΩ,1/16W |
| | | R2041 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R2042 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R2043 | NRSA63J-105X | MG RESISTOR | 1MΩ,1/16W |
| | | R2044 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2047 | NRSA63J-224X | MG RESISTOR | 220kΩ,1/16W |
| | | R2048 | NRSA63J-224X | MG RESISTOR | 220kΩ,1/16W |
| | | R2049 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2050 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R2052 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2053 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2054 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2055 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2056 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2057 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2058 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2059 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2060 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2061 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2062 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2082 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2083 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2084 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2085 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2086 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2087 | NRSA63J-105X | MG RESISTOR | 1MΩ,1/16W |
| | | R2088 | NRSA63J-105X | MG RESISTOR | 1MΩ,1/16W |
| | | R2089 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2090 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2091 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2092 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2093 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2094 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2098 | NQR0146-004X | FERRITE BEAD | |
| | | R2101 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2102 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2103 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2104 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2106 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2107 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2108 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2109 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2110 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2112 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2113 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2114 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2115 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2116 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R2117 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2118 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2119 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2121 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2122 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2123 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2124 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2125 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2126 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2140 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2141 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2142 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R2145 | NRSA63J-561X | MG RESISTOR | 560Ω,1/16W |
| | | R2146 | NRSA63J-392X | MG RESISTOR | 3.9kΩ,1/16W |
| | | R2149 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R2150 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R3003 | NRSA63J-821X | MG RESISTOR | 820Ω,1/16W |
| | | R3004 | NRSA63J-271X | MG RESISTOR | 270Ω,1/16W |
| | | R3005 | NRSA63J-101X | MG RESISTOR | 100Ω,1/16W |
| | | R3007 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3008 | NRSA63J-152X | MG RESISTOR | 1.5kΩ,1/16W |
| | | R3024 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3025 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3026 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3027 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3028 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3029 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3032 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3033 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3034 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3035 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3048 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3054 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3056 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3057 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3058 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3064 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3065 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3069 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3070 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3071 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3073 | NRSA63J-272X | MG RESISTOR | 2.7kΩ,1/16W |
| | | R3074 | NRSA63J-821X | MG RESISTOR | 820Ω,1/16W |
| | | R3076 | NRSA63J-101X | MG RESISTOR | 100Ω,1/16W |
| | | R3078 | NRSA63J-152X | MG RESISTOR | 1.5kΩ,1/16W |
| | | R3079 | NRSA63J-272X | MG RESISTOR | 2.7kΩ,1/16W |
| | | R3080 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3101 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3102 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R3103 | NRSA63J-331X | MG RESISTOR | 330Ω,1/16W |
| | | R3104 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3105 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R3106 | NRSA63J-271X | MG RESISTOR | 270Ω,1/16W |
| | | R3111 | NRSA63J-563X | MG RESISTOR | 56kΩ,1/16W |
| | | R3112 | NRSA63J-473X | MG RESISTOR | 47kΩ,1/16W |
| | | R3113 | NRSA63J-220X | MG RESISTOR | 22Ω,1/16W |
| | | R3114 | NRSA63J-681X | MG RESISTOR | 680Ω,1/16W |
| | | R3115 | NRSA63J-821X | MG RESISTOR | 820Ω,1/16W |
| | | R3116 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R3117 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R3118 | NRSA63J-473X | MG RESISTOR | 47kΩ,1/16W |
| | | R3119 | NRSA63J-563X | MG RESISTOR | 56kΩ,1/16W |
| | | R3120 | NRSA63J-681X | MG RESISTOR | 680Ω,1/16W |
| | | R3121 | NRVA63D-821X | CMF RESISTOR | 820Ω,1/16W |
| | | R3122 | NRVA63D-821X | CMF RESISTOR | 820Ω,1/16W |
| | | R3123 | NRSA63J-271X | MG RESISTOR | 270Ω,1/16W |
| | | R3124 | NRSA63J-474X | MG RESISTOR | 470kΩ,1/16W |
| | | R3125 | NRSA63J-331X | MG RESISTOR | 330Ω,1/16W |
| | | R3131 | NRSA63J-563X | MG RESISTOR | 56kΩ,1/16W |
| | | R3132 | NRSA63J-473X | MG RESISTOR | 47kΩ,1/16W |
| | | R3133 | NRSA63J-220X | MG RESISTOR | 22Ω,1/16W |
| | | R3134 | NRSA63J-681X | MG RESISTOR | 680Ω,1/16W |
| | | R3135 | NRSA63J-821X | MG RESISTOR | 820Ω,1/16W |
| | | R3136 | NRSA63J-183X | MG RESISTOR | 18kΩ,1/16W |
| | | R3137 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R3138 | NRSA63J-473X | MG RESISTOR | 47kΩ,1/16W |
| | | R3139 | NRSA63J-393X | MG RESISTOR | 39kΩ,1/16W |
| | | R3140 | NRSA63J-681X | MG RESISTOR | 680Ω,1/16W |
| | | R3141 | NRVA63D-821X | CMF RESISTOR | 820Ω,1/16W |
| | | R3142 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R3143 | NRSA63J-271X | MG RESISTOR | 270Ω,1/16W |
| | | R3161 | NRSA63J-105X | MG RESISTOR | 1MΩ,1/16W |
| | | R3162 | NRSA63J-221X | MG RESISTOR | 220Ω,1/16W |
| | | R3163 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3164 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3501 | NRSA63J-225X | MG RESISTOR | 2.2MΩ,1/16W |
| | | R3502 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R3503 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R3504 | NRSA63J-121X | MG RESISTOR | 120Ω,1/16W |
| | | R3505 | NRSA63J-680X | MG RESISTOR | 68Ω,1/16W |
| | | R3506 | NRSA63J-750X | MG RESISTOR | 75Ω,1/16W |
| | | R3507 | NRSA63J-680X | MG RESISTOR | 68Ω,1/16W |
| | | R3508 | NRSA63J-750X | MG RESISTOR | 75Ω,1/16W |
| | | R3509 | NRSA63J-224X | MG RESISTOR | 220kΩ,1/16W |
| | | R3510 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R3511 | NRSA63J-203X | MG RESISTOR | 20kΩ,1/16W |
| | | R3512 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R3521 | NRSA63J-621X | MG RESISTOR | 620Ω,1/16W |
| | | R3522 | NRSA63J-472X | MG RESISTOR | 4.7kΩ,1/16W |
| | | R3523 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R3524 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R3526 | NRSA63J-681X | MG RESISTOR | 680Ω,1/16W |
| | | R3527 | NRSA63J-472X | MG RESISTOR | 4.7kΩ,1/16W |
| | | R3528 | NRSA63J-332X | MG RESISTOR | 3.3kΩ,1/16W |
| | | R3529 | NRSA63J-222X | MG RESISTOR | 2.2kΩ,1/16W |
| | | R3532 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3534 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3701 | NRSA63J-153X | MG RESISTOR | 15kΩ,1/16W |
| | | R3702 | NRSA63J-153X | MG RESISTOR | 15kΩ,1/16W |
| | | R3703 | NRSA63J-822X | MG RESISTOR | 8.2kΩ,1/16W |
| | | R3704 | NRSA63J-822X | MG RESISTOR | 8.2kΩ,1/16W |
| | | R3705 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3709 | NRSA63J-100X | MG RESISTOR | 10Ω,1/16W |
| | | R3711 | NRSA63J-302X | MG RESISTOR | 3kΩ,1/16W |
| | | R3712 | NRSA63J-302X | MG RESISTOR | 3kΩ,1/16W |
| | | R3713 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R3714 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R3715 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3716 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R3717 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | R3718 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3719 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | R3720 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R3721 | NRSA63J-221X | MG RESISTOR | 220Ω,1/16W |
| | | R3722 | NRSA63J-272X | MG RESISTOR | 2.7kΩ,1/16W |
| | | R3723 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R3726 | NRSA63J-102X | MG RESISTOR | 1kΩ,1/16W |
| | | R3727 | NRSA63J-272X | MG RESISTOR | 2.7kΩ,1/16W |
| | | R3728 | NRSA63J-221X | MG RESISTOR | 220Ω,1/16W |
| | | R3731 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3732 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3733 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3734 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3735 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3736 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R3740 | NRSA63J-221X | MG RESISTOR | 220Ω,1/16W |
| | | R4001 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R4002 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | R4011 | NRSA63J-103X | MG RESISTOR | 10kΩ,1/16W |
| | | RA1001 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1002 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1003 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1004 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1005 | NRZ0040-104X | NETWORK RESISTOR | |
| | | RA1006 | NRZ0040-104X | NETWORK RESISTOR | |
| | | RA1501 | NRZ0040-0R0X | NETWORK RESISTOR | |
| | | RA1502 | NRZ0040-0R0X | NETWORK RESISTOR | |
| | | RA1503 | NRZ0040-0R0X | NETWORK RESISTOR | |
| | | RA1504 | NRZ0040-0R0X | NETWORK RESISTOR | |
| | | RA1505 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1506 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1507 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1508 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1509 | NRZ0040-102X | NETWORK RESISTOR | |
| | | RA1510 | NRZ0040-473X | NETWORK RESISTOR | |
| | | RA4001 | NRZ0040-0R0X | NETWORK RESISTOR | |
| | | RA4002 | NRZ0040-0R0X | NETWORK RESISTOR | |
| | | C1001 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1002 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1006 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1007 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1008 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1010 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1011 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1021 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1041 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1042 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1043 | NDC31HJ-120X | CAPACITOR | 12pF,50V |
| | | C1044 | NDC31HJ-120X | CAPACITOR | 12pF,50V |
| | | C1045 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1047 | NBE21AM-106X | T CAPACITOR | 10μF,10V |
| | | C1051 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C1052 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1053 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C1054 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1055 | NEA70JM-107X | E CAPACITOR | 100μF,6.3V |
| | | C1056 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1057 | NEA70JM-107X | E CAPACITOR | 100μF,6.3V |
| | | C1058 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1059 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C1060 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1061 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1062 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1063 | NEA70JM-107X | E CAPACITOR | 100μF,6.3V |
| | | C1064 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1067 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1068 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1069 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C1070 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C1501 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1502 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1504 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1505 | NCB31EK-103X | CAPACITOR | 0.01μF,25V |
| | | C1506 | NCB31EK-103X | CAPACITOR | 0.01μF,25V |
| | | C1507 | NCB31EK-103X | CAPACITOR | 0.01μF,25V |
| | | C1508 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1509 | NEA70JM-476X | E CAPACITOR | 47μF,6.3V |
| | | C1510 | NEA70JM-476X | E CAPACITOR | 47μF,6.3V |
| | | C1515 | NCB31EK-223X | CAPACITOR | 0.022μF,25V |
| | | C1516 | NCB31EK-223X | CAPACITOR | 0.022μF,25V |
| | | C1517 | NCB31EK-223X | CAPACITOR | 0.022μF,25V |
| | | C1518 | NCB31EK-223X | CAPACITOR | 0.022μF,25V |
| | | C1521 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1522 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C1523 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2001 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2002 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2003 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2005 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2006 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2007 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2008 | NDC31HJ-120X | CAPACITOR | 12pF,50V |
| | | C2009 | NDC31HJ-120X | CAPACITOR | 12pF,50V |
| | | C2010 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2011 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2014 | NDC31HJ-390X | CAPACITOR | 39pF,50V |
| | | C2015 | NDC31HJ-102X | CAPACITOR | 0.001μF,50V |
| | | C2016 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2017 | NCF21CZ-105X | CAPACITOR | 1μF,16V |
| | | C2018 | NCB31EK-472X | CAPACITOR | 0.0047μF,25V |
| | | C2019 | NDC31HJ-271X | CAPACITOR | 270pF,50V |
| | | C2020 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2022 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2023 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2024 | NDC31HJ-6R0X | CAPACITOR | 6pF,50V |
| | | C2025 | NDC31HJ-6R0X | CAPACITOR | 6pF,50V |
| | | C2026 | NDC31HJ-102X | CAPACITOR | 0.001μF,50V |
| | | C2027 | NDC31HJ-390X | CAPACITOR | 39pF,50V |
| | | C2028 | NDC31HJ-102X | CAPACITOR | 0.001μF,50V |
| | | C2029 | NDC31HJ-330X | CAPACITOR | 33pF,50V |
| | | C2031 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2032 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2033 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2036 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2037 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2038 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2039 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2040 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2041 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2042 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2043 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2044 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2051 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2052 | NCF21CZ-105X | CAPACITOR | 1μF,16V |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C2053 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2054 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2055 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2056 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2057 | NCF21CZ-105X | CAPACITOR | 1μF,16V |
| | | C2058 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2059 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2060 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2061 | NCF21CZ-105X | CAPACITOR | 1μF,16V |
| | | C2062 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2101 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2102 | NDC31HJ-151X | CAPACITOR | 150pF,50V |
| | | C2104 | NCB31EK-473X | CAPACITOR | 0.047μF,25V |
| | | C2105 | NBE21AM-106X | T CAPACITOR | 10μF,10V |
| | | C2106 | NCF21CZ-105X | CAPACITOR | 1μF,16V |
| | | C2107 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2108 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2109 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2110 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2111 | NCF21CZ-105X | CAPACITOR | 1μF,16V |
| | | C2112 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C2113 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C2114 | NCB31EK-103X | CAPACITOR | 0.01μF,25V |
| | | C2115 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3001 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3002 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3003 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3004 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3005 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3006 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3007 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3008 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3009 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3010 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3011 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C3012 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3013 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3014 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3015 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3016 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3017 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3101 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3102 | QEKJ0JM-337 | E CAPACITOR | 330μF,6.3V |
| | | C3103 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3106 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C3107 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3108 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C3109 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3111 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3112 | NEA70JM-476X | E CAPACITOR | 47μF,6.3V |
| | | C3113 | NDC31HJ-220X | CAPACITOR | 22pF,50V |
| | | C3114 | NDC31HJ-8R0X | CAPACITOR | 8pF,50V |
| | | C3115 | NDC31HJ-220X | CAPACITOR | 22pF,50V |
| | | C3116 | NCB20JM-475X | CAPACITOR | 4.7μF,6.3V |
| | | C3118 | NCB21CK-334X | CAPACITOR | 0.33μF,16V |
| | | C3119 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3121 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3122 | NDC31HJ-8R0X | CAPACITOR | 8pF,50V |
| | | C3124 | NDC31HJ-120X | CAPACITOR | 12pF,50V |
| | | C3125 | NCB20JM-475X | CAPACITOR | 4.7μF,6.3V |
| | | C3126 | NRSA63J-822X | MG RESISTOR | 8.2kΩ,1/16W |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C3127 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3128 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3131 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C3132 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3140 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3141 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3142 | NDC31HJ-8R0X | CAPACITOR | 8pF,50V |
| | | C3143 | NDC31HJ-8R0X | CAPACITOR | 8pF,50V |
| | | C3501 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3502 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3503 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3504 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C3505 | NEA70JM-107X | E CAPACITOR | 100μF,6.3V |
| | | C3506 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C3507 | NDC31HJ-220X | CAPACITOR | 22pF,50V |
| | | C3508 | NDC31HJ-220X | CAPACITOR | 22pF,50V |
| | | C3509 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3510 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3511 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3512 | NRSA63J-0R0X | MG RESISTOR | 0Ω,1/16W |
| | | C3513 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3514 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3515 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C3520 | NEA70JM-107X | E CAPACITOR | 100μF,6.3V |
| | | C3521 | NEA70JM-107X | E CAPACITOR | 100μF,6.3V |
| | | C3522 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3523 | NEA70JM-226X | E CAPACITOR | 22μF,6.3V |
| | | C3524 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3525 | NBE21AM-106X | T CAPACITOR | 10μF,10V |
| | | C3531 | NDC31HJ-120X | CAPACITOR | 12pF,50V |
| | | C3532 | NDC31HJ-150X | CAPACITOR | 15pF,50V |
| | | C3533 | NDC31HJ-470X | CAPACITOR | 47pF,50V |
| | | C3534 | NDC31HJ-390X | CAPACITOR | 39pF,50V |
| | | C3535 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3536 | NDC31HJ-120X | CAPACITOR | 12pF,50V |
| | | C3537 | NDC31HJ-150X | CAPACITOR | 15pF,50V |
| | | C3538 | NDC31HJ-470X | CAPACITOR | 47pF,50V |
| | | C3539 | NDC31HJ-390X | CAPACITOR | 39pF,50V |
| | | C3540 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3701 | NCF21CZ-105X | CAPACITOR | 1μF,16V |
| | | C3702 | NCF21CZ-105X | CAPACITOR | 1μF,16V |
| | | C3703 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3704 | NEA71CM-106X | E CAPACITOR | 10μF,16V |
| | | C3705 | NDC31HJ-151X | CAPACITOR | 150pF,50V |
| | | C3706 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3707 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3708 | NDC31HJ-151X | CAPACITOR | 150pF,50V |
| | | C3709 | NEA71CM-106X | E CAPACITOR | 10μF,16V |
| | | C3710 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3711 | NEA71CM-106X | E CAPACITOR | 10μF,16V |
| | | C3712 | NEA71CM-106X | E CAPACITOR | 10μF,16V |
| | | C3713 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3714 | NEA71CM-106X | E CAPACITOR | 10μF,16V |
| | | C3715 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3716 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3717 | NEA71CM-106X | E CAPACITOR | 10μF,16V |
| | | C3718 | NEA71CM-106X | E CAPACITOR | 10μF,16V |
| | | C3725 | NCB31HK-332X | CAPACITOR | 0.0033μF,50V |
| | | C3726 | NCB31HK-682X | CAPACITOR | 0.0068μF,50V |
| | | C3728 | NCB31CK-104X | CAPACITOR | 0.1μF,16V |
| | | C3729 | NEA71CM-476X | E CAPACITOR | 47μF,16V |

| # | ⚠ | REF No. | PART No. | PART NAME, DESCRIPTION | |
|---|---|---|---|---|---|
| | | C3730 | NEA71CM-476X | E CAPACITOR | 47µF,16V |
| | | C3731 | NCB31CK-104X | CAPACITOR | 0.1µF,16V |
| | | C3733 | NCB31HK-332X | CAPACITOR | 0.0033µF,50V |
| | | C3734 | NCB31HK-682X | CAPACITOR | 0.0068µF,50V |
| | | L1011 | NQL144K-100X | COIL | 10µH |
| | | L1012 | NQL17CM-390X | COIL | 39µH |
| | | L1013 | NQL17CM-390X | COIL | 39µH |
| | | L1015 | NQL17CM-390X | COIL | 39µH |
| | | L1018 | NQL17CM-390X | COIL | 39µH |
| | | L1501 | NQL144K-100X | COIL | 10µH |
| | | L1502 | NQL144K-100X | COIL | 10µH |
| | | L2001 | NQL144K-100X | COIL | 10µH |
| | | L2002 | NQL144K-100X | COIL | 10µH |
| | | L2003 | NQL144K-100X | COIL | 10µH |
| | | L2004 | NQL144K-100X | COIL | 10µH |
| | | L2005 | NQL144K-100X | COIL | 10µH |
| | | L2006 | NQL144K-100X | COIL | 10µH |
| | | L2007 | NQL144K-100X | COIL | 10µH |
| | | L2008 | NQL144K-100X | COIL | 10µH |
| | | L2009 | NQL024J-2R2X | COIL | 2.2µH |
| | | L2010 | NQL024J-100X | COIL | 10µH |
| | | L2011 | NQL024J-120X | COIL | 12µH |
| | | L2015 | NQR0276-001X | COIL | 10µH |
| | | L3103 | NQL144K-100X | COIL | 10µH |
| | | L3111 | NQL024J-150X | COIL | 15µH |
| | | L3131 | NQL024J-150X | COIL | 15µH |
| | | L3151 | NQL144K-100X | COIL | 10µH |
| | | L3531 | NQL024J-120X | COIL | 12µH |
| | | L3532 | NQL024J-270X | COIL | 27µH |
| | | L3533 | NQL024J-120X | COIL | 12µH |
| | | L3534 | NQL024J-270X | COIL | 27µH |
| | | L3701 | NQL144K-100X | COIL | 10µH |
| | | L3702 | NQL144K-100X | COIL | 10µH |
| | | L4001 | NQL144K-100X | COIL | 10µH |
| | | LC1002 | PELN1148-223X | NOISE FILTER | |
| | | LC1003 | PELN1148-223X | NOISE FILTER | |
| | | LC1005 | PELN1148-223X | NOISE FILTER | |
| | | LC3101 | PELN0969-04Y | NOISE FILTER | |
| | | X1001 | NAX0294-001X | RESONATOR | |
| | | X1002 | NAX0005-001X | CRYSTAL RESONATOR | |
| | | X2001 | NAX0141-001X | CRYSTAL RESONATOR | |
| | | X2003 | NAX0206-001X | CRYSTAL RESONATOR | |
| | | X3101 | NAX0218-001X | CRYSTAL RESONATOR | |
| | | K1001 | NQR0129-002X | FERRITE BEAD | |
| | | K1011 | NQR0129-002X | FERRITE BEAD | |
| | | K1012 | NQR0129-002X | FERRITE BEAD | |
| | | K2001 | NQR0129-002X | FERRITE BEAD | |
| | | K3101 | NRSA63J-820X | MG RESISTOR | 82Ω,1/16W |
| | | J2001 | QNZ0097-001 | D CONNECTOR,DV IN/OUT | |
| | | OT1 | PU59915-105 | #500SPACER0.01 | |
| | | OT2 | PU59915-105 | #500SPACER0.01,C3102 | |
| | | WR1101 | YU40017-080-1 | THIN WIRE | |
| | | WR3001 | QUB3531-04A1A1 | THIN WIRE | |
| | | CN1001 | QGA2001F2-10V | CONNECTOR,(1-10)REG | |
| | | CN1002 | QGF1016F2-06W | FFC/FPC CONNECTOR,(1-6)VHS MAIN | |
| | | CN1101 | QGB0801L1-26X | CONNECTOR,(1-26)JIG | |
| | | CN1501 | QGF0508F1-20X | FPC CONNECTOR,(1-20)PRE/REC | |
| | | CN1502 | QGF0503C1-15V | FFC/FPC CONNECTOR,(1-15)MECHA | |
| | | CN2001 | QGF0508F1-26X | FPC CONNECTOR,(1-26)DV PRE/REC | |
| | | CN3501 | QGA2001F2-06V | CONNECTOR,(1-6)VIDEO | |
| | | CN3701 | QGF1016F4-08W | FFC/FPC CONNECTOR,(1-8)AUDIO | |

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## LOADING MOTOR BOARD ASSEMBLY <55>

| | | |
|---|---|---|
| PW1 | LPA10010-01A2 | LOADING MOTOR BOARD ASSY |
| CN1 | QGB2533K1-02 | CONNECTOR |

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## JOG BOARD ASSEMBLY <85>

| | | |
|---|---|---|
| PW6 | LPA10126-01C6 | JOG BOARD ASSY |
| UN7091 | PEME0786-02 | JOG SHUTTLE ASSY |
| B7094 | QUY153-050Y | IM BUS WIRE |
| FW7007 | QUM036-06A4A4 | PARA RIBON WIRE |